

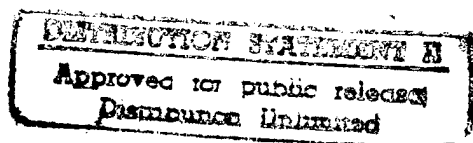
AFIT/GCM/LAS/97S-15

**AN EXAMINATION OF THE PAST PERFORMANCE
PROCEDURES USED IN AIR FORCE MATERIEL
COMMAND SOURCE SELECTIONS**

THESIS

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AFIT/GCM/LAS/97S-15



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THESIS

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Table of Contents

	Page
Acknowledgments.....	ii
List of Figures.....	vii
List of Tables	viii
Abstract.....	ix
I. Introduction	1
General Issue	1
Specific Problem.....	3
Investigative Questions.....	4
II. Literature Review	6
Introduction	6
Recent Emphasis on Past Performance.....	6
Best Value and Past Performance.....	11
Overview of the Source Selection Process	14
Performance Risk Assessment.....	21
Sources of Past Performance Information	26
Relevancy Determinations.....	30
Problem Restatement.....	30
III. Research Methodology	32
Introduction	32
Objectives	32
Objective #1: Storing the Information.....	33
Objective #2: Protecting the Information	34
Objective #3: Relevancy Determinations	35
Objective #4: Sources of Past Performance Information	35
Objective #5: Past Performance Information Types.....	36
Objective #6: Similarities and Differences Between Past Performance Information Systems.....	36
Indexing the Results for Analysis of Similarities and Differences Between Past Performance Information Systems	37
The Sample.....	38

	Page
Interviews	39
Interview Questions	40
A. Storing the Information.	41
B. Protecting the Information.....	42
C. Performing Relevancy Determinations.	43
D. Sources of Past Performance Information.....	44
E. Past Performance Information Types.....	44
Content Validity	45
Summary.....	46
 IV. Results.....	 48
Introduction	48
Objective #1: Storing the Information.....	48
Objective #2: Protecting the Information	52
Objective #3: Performing Relevancy Determinations	55
Objective #4: Sources of Past Performance Information	58
Objective #5: Past Performance Information Types.....	61
Objective #6: Similarities and Differences Between Past Performance Information Systems.....	 64
Test A: Do the information systems offer the contractor an opportunity to review the information?	 65
Test B: Do the information systems provide the same level of authorization to input or retrieve information?	 65
Test C: Do the information systems use the same relevancy criteria?.....	66
Test D: Do all work centers use the same sources of past performance information regardless if they have an in-house database or not?.....	 67
Test E: Do the information systems use the same past performance information types?.....	 68
Summary.....	71
 V. Conclusions and Recommendations	 73
Introduction	73
Objective #1: Storing the Information.....	74
Objective #2: Protecting the Information	76
Test A (Objective #6): Do the information systems offer the contractor an opportunity to review the information?.....	 76
Test B (Objective #6): Do the information systems provide the same level of authorization to input or retrieve information?	 77
Objective #3: Performing Relevancy Determinations	78
Test C (Objective #6): Do the information systems use the same relevancy criteria?.....	 80

	Page
Objective #4: Sources of Past Performance Information	81
Test D (Objective #6): Do all work centers use the same sources of past performance information regardless if they have an in-house database or not?	82
Objective #5: Past Performance Information Types.....	83
Test E (Objective #6): Do the information systems use the same past performance information types?.....	83
Recommendations	84
Limitations.....	86
Recommendations for Further Research	87
Summary.....	87
Appendix A: Interview for AFMC Contracting Personnel.....	91
A. Storing the Information.	91
B. Protecting the Information.....	91
C. Performing Relevancy Determinations.	92
D. Sources of Past Performance Information.....	92
E. Past Performance Information Types.....	93
Bibliography	94
Vita.....	97

List of Figures

Figure	Page
1. A Typical Source Selection Organization.....	15
2. Example of an Evaluation Matrix	18
3. Categories for Recording Past Performance Information	22
4. Two Different Treatments of Past Performance Information	24
5. Protection Measures Implemented By AFMC Work Centers	52
6. Authorization to Input Information By AFMC Work Centers	53
7. Authorization to Retrieve Information By AFMC Work Centers	54
8. Relevancy Criteria Used By AFMC Work Centers	56
9. Similarities and Differences of Relevancy Criteria By Information System.....	66
10. Similarities and Differences of Past Performance Information Sources By Information System	68
11. Similarities and Differences of Past Performance Information Types By Information System	70

List of Tables

Table	Page
1. Past Performance Information Systems Used By AFMC Work Centers.....	49
2. Similarities and Differences of Relevancy Criteria By Information System.....	66
3. Similarities and Differences of Past Performance Information Sources By Information System	67
4. Similarities and Differences of Past Performance Information Types By Information System	69

Abstract

The Air Force Materiel Command's mission is to acquire and maintain Air Force weapon systems. The primary contracting method of acquiring weapon systems uses source selections. A source selection is a means of evaluating proposals in terms of credibility, performance, and cost. Among the different criteria used in this selection, recent emphasis has been placed on the use of past performance.

Formal guidelines for collecting and storing past performance information have already been established for acquisitions over \$5 million. However, recent policy has directed the use of past performance for all acquisitions over \$100,000. Presently, the \$100,000 to \$5 million range leaves contracting officers and buyers great flexibility and little guidance in utilizing past performance for their source selections. The purpose of this exploratory study is to demonstrate how these professionals are responding to the past performance emphasis within this acquisition range. Methods of collecting, storing, and protecting past performance information were obtained as well as the kinds of information. How they determine the information's relevancy was also outlined. In addition, this research effort probed lessons learned by these acquisition professionals.

AN EXAMINATION OF THE PAST PERFORMANCE PROCEDURES USED IN AIR FORCE MATERIEL COMMAND SOURCE SELECTIONS

I. Introduction

General Issue

The Air Force Materiel Command's mission is to contribute to combat superiority, readiness, and sustainability. The AFMC Mission states, "Through integrated management of research, development, test acquisition, and support, we advance and use technology to acquire and sustain superior systems in partnership with our customers and suppliers" (AFMC Home-page, 1997:1).

Acquisition of such technology involves the purchase of unique requirements. A sealed-bidding procurement implies that the only evaluation factor necessary is price. However, AFMC does not deal primarily with commercial-off-the-shelf items, which are ideal for sealed bids. There is usually more than one method to deliver the supplies and services of some of AFMC's unique requirements. Therefore, competitive proposals may be more suitable for the acquisition. Here, offerors are given objectives and in return they provide a proposal on how they are going to meet them. The Government's evaluation of these proposals should be evaluated on factors besides price alone. For large acquisitions, this method of evaluation is termed the "source selection." It is a complex and thorough process of procuring systems by means of evaluating competitive proposals

in terms of achieving the best expected value. According to the *Air Force Federal Acquisition Regulation Supplement*,

the objective of the source selection process is to select the source whose proposal has the highest degree of credibility and whose performance can be expected to best meet the Government's requirements at an affordable cost. (1996:BB-1)

In achieving best value, a philosophy exists that contractors will work in the future as they have demonstrated in the past. The past performance evaluation process is a mechanism that provides a certain confidence that the offeror has the capability and desire to accomplish the promises of the proposal. Formerly, performance risk ratings have been insignificant in the final award decision because responsibility determinations already served as an indicator that the offeror can successfully accomplish the contract requirements. This determination is made when the contracting officer must decide if the apparent successful offeror can perform the contract. The past performance criterion differs from a responsibility determination in that it offers a comparison of an offeror's track record with other offerors during the competitive selection process to determine which one has the best value. The responsibility determination merely ensures that the contractor has had a satisfactory performance record in order to do business with the Government. Using past performance information also assists in the development of an acquisition strategy (e. g., contract type), places more effective management attention on contractor performance, and even improves contractor performance.

Using past performance evaluations is not new to Government source selections. However, in the stream of Acquisition Reform, the Office of Federal Procurement Policy officially created past performance as an evaluation criterion in 1993. In 1995, under one

of the "Lightning Bolt Initiatives," the Air Force formed an investigative action team to manage effective implementation of past performance policy.

Either a Performance Risk Assessment Group (PRAG) or a smaller unit, which includes a contracting officer and one or more buyers, evaluates past performance. It is assessed in terms of the offeror's ability to accomplish the work detailed in the proposal, given the offeror's past and present work record. According to the *Air Force Federal Acquisition Regulation Supplement*, "past and present performance must demonstrate an ability to achieve management objectives shown by performance on related Government efforts" (1996: BB-44). Using past performance information demonstrates an "actual ability to perform" and increased use of this evaluation criteria should be widely supported by the defense industry (Brislawn and Dowd, 1996:16).

Specific Problem

For acquisitions over \$5 million, PRAG's have regulatory guidelines for obtaining and storing past performance information (i. e., AFFARS Appendix AA and BB and AFMC Instruction 64-107, Contractor Performance Assessment Reporting System). However, acquisitions under \$5 million do not require the use of PRAG's for performance risk ratings. The contracting officer and buyer(s) have great flexibility in how they perform this function but they do not have any regulatory guidance on how. Thus, in-house methods have been established to address past performance. Policy officials at HQ AFMC wish to provide guidance to enhance a more effective practice of using past performance as a criteria in source selections. The results of such guidance could offer a standard process which promotes equality and fairness to offerors. A

systemic, exploratory study is necessary to learn how the contracting officers and buyers are currently implementing the past performance process in order to provide HQ AFMC feedback for their guidance. This research effort focuses on the past performance information system for acquisitions between \$1 to 5 million and makes recommendations for effective practice of the past performance process. Implementation below \$1 million is highly unexpected.

Investigative Questions

This research will investigate how AFMC acquisition professionals have been implementing past performance in their source selections. The research effort is broken into the following investigative questions:

- 1) How are the Contracting Officers storing their past performance information?
- 2) How are the Contracting Officers protecting the past performance information?
- 3) How are the Contracting Officers making their relevancy determinations?
- 4) What sources of collecting past performance information are being used?
- 5) What questions are being asked when collecting the information?
- 6) What similarities and differences exist between past performance information systems?

When integrated together, the answers to these questions will reveal the past performance evaluation procedures currently used for the lower dollar acquisitions. As a result, an outline of the commonalities and differences among these methods will be provided. Then, an analysis will investigate the similarities and differences between past

performance information systems. From this analysis, suggestions will be made for future, lower dollar AFMC acquisitions.

II. Literature Review

Introduction

This chapter describes the top-level emphasis for using past performance criteria. Research involving evaluation criteria is then presented. Next, an overview of the source selection process is provided to gain an understanding of how past performance may be a significant evaluation criterion in the procurement of best value contracts. Performance risk assessment is then addressed to explain how past performance is actually used in the source selection. Sources of past performance information are listed and finally the relevancy determination is also addressed.

Recent Emphasis on Past Performance

The use of past performance information was given a boost in 1986 in a report to President Reagan entitled *A Formula for Action, A Report to the President on Defense Acquisition* by the President's Blue Ribbon Commission on Defense Management. This report is more commonly called "The Packard Commission" and calls for more use of commercial-style practices in Government acquisitions. The doctrine was captured in the following passage:

Typically, an industrial company will keep lists of qualified suppliers that have maintained historically high standards of product quality and reliability. As long as these standards are maintained, industrial buyers do not require exhaustive inspection, and thereby save expense on both sides. Suppliers are highly motivated to get and stay on lists of qualified suppliers by consistently exceeding quality control standards. (1986:62-63)

As the Packard Commission emphasized quality and establishing performance measures for the basis of contract award, the General Accounting Office (GAO)

performed a study from 1988 to 1992 on contracts awarded by using past performance as an award criteria rather than simply selecting the lowest priced offeror. The vendors' past performance information related experience, quality, and delivery. The pilot program identified an insignificant increase in price when awarding to a member of the "Quality Vendor Programs" (1993:5).

In 1993, the *Federal Register* published its implementation of OFPP Policy Letter 92-5 to make past performance an official evaluation criterion in source selections. Past performance information has always been used in responsibility determinations, but this policy letter establishes past performance as a specific evaluation criteria to be used in equal comparison with the factor assessment and proposal risk for each factor (1993:3573).

Formerly, performance risk ratings have been insignificant to the final award decision because responsibility determinations already serve as an indicator that the offeror can successfully accomplish the contract requirements. This determination is made after the apparent successful bidder is identified and when the contracting officer must decide if the offeror can successfully perform the contract. The past performance criterion differs from a responsibility determination in that the past performance criterion offers a comparison of an offeror's performance track record with other offerors during the competitive selection process to determine which one has the best value. The performance track record includes information such as the "number and severity of an offeror's problems, the effectiveness of corrective actions taken, [and] the offeror's overall work record" (DoD Wisdom Focal Point, 1996:1). In contrast, responsibility considers having the financial resources, satisfactory performance record, business integrity and

ethics, organization, experience, skills, controls, equipment, and facilities to successfully perform the contract and comply with the delivery schedule (FAR 9.104). Besides using past performance information as a competition factor, it also assists in the development of an acquisition strategy, places more effective oversight on contractor performance, and even improves contractor performance (Little, 1996:38).

From the direction of OFPP Policy Letter 92-5, the change to acquisition policy requires Government agencies “to prepare evaluations of contractor performance on all contracts over \$100,000 and to specify past performance as an evaluation factor in solicitations for offers for all competitively negotiated contracts expected to exceed \$100,000” (1993:3573). The letter also recognizes that a contractor’s past performance information may reflect poor subcontractor performance. In this regard, the policy dictates that “A prime contractor’s ability to select subcontractors that perform is indicative of the contractor’s management ability” (1993:3574).

The Federal Acquisition Streamlining Act of 1994 made past performance a mandatory source selection evaluation factor (Scott, 1995:4). In response, twenty federal departments and agencies participated in the past performance pledge on January 26, 1994 in the award of 60 contracts (ARNet, 1996:5). The list of pledges included the Department of Air Force and Defense Logistics Agency. All pledges supported past performance as a major selection criteria by establishing interagency teams for effective structuring of solicitations and evaluation offers, identifying and eliminating obstacles, and providing information and lessons learned to the others (ARNet, 1996:Appendix 1:5).

The Federal Acquisition Regulation implements OFPP Policy Letter 92-5 under FAR 42.15. Its guidance suggests that agencies shall provide inputs into evaluation procedures (FAR 42.1503(a)).

The Air Force responded to Acquisition Reform with the issuance of nine Lightning Bolt Initiatives. Lightning Bolt #6, which states "Enhance the role of past performance in source selections," responds to the FAR's direction that the Air Force shall provide guidance into evaluation procedures (Dept of Air Force "Air Force Acquisition," 1995:2). Based on this Lightning Bolt, a team led by HQ AFMC implemented past performance policy revisions to the AFFARS Supplement, provided standards and methods to assess past performance, and improved the effectiveness of the Contractor Performance Assessment Reporting System by revising the instructions and forms. However, the guidance provided in AFFARS Appendices AA and BB and CPARS are not applicable for acquisitions under \$5 million.

In a report to the Office of the Secretary of Defense, Arthur D. Little, Inc., a research company, issued seven recommendations for the formulation of a past performance policy (Little, 1996:10-11). The recommendations included that information systems should be decentralized to the service level instead of a defense-wide system because the value of past performance decreases as a past performance system is standardized. Thus, focus should be placed on the past performance information that is relevant to each acquisition's business area. Little also notes the current view is fixed on one facet (collection and validation) of past performance; it should be placed on the total program context instead. A simple approach based on user needs for a system that

enables information sharing will exert a horizontal integration effect “by joining similar business areas across the services and DLA” (1996:11).

In the same report to the OSD, the Little report outlines the importance of using past performance information in Department of Defense source selections. This outline contains the following six reasons why past performance evaluations are useful: 1) they evaluate performance risk; 2) they assist the development of an acquisition strategy (e. g., contract type); 3) they require more effective management of contractor performance; 4) they improve contractor performance; 5) they create more effective allocation/oversight; and 6) they streamline the technical and management evaluations with the element of performance risk (Little, 1996:38).

A schedule for the implementation of past performance policies was outlined by Dr. Kelman (OFPP Administrator of Federal Procurement Policy). The schedule required the use of past performance as a source selection factor for all solicitations over \$1 million by July 1, 1995, solicitations over \$500,000 by July 1, 1997, and solicitations over \$100,000 by January 1, 1999 (ARNet, 1996:10). These mandatory milestones are established in FAR 15.605(b)(1)(ii). Dr. Kelman further details the substantiation of a performance reporting system for contracts over \$1 million by July 1, 1995; contracts over \$500,000 by July 1, 1996; and contracts over \$100,000 by January 1, 1998 (ARNet, 1996:10).

Best Value and Past Performance

As stewards of the public's money, the Government is compelled to find the most effective and efficient decision criteria for awarding contracts. The most common criteria is using the lowest priced offer. However, there may be a reason why the offer is priced so low, as the axiom suggests "you get what you pay for." Therefore, the Government is trying to develop a standardized concept of achieving the best expected value.

Attempts have been made to explain the trade-off relationship with cost and all other factors, or criteria, that would account for the "best value." The "beef stew" metaphor identifies ingredients that combine into best value, such as trading cost for technical benefits (Solloway, 1989:9). In this decision-making image, all relative criteria are added together in a relative ranking of importance and then reflected in a final selection decision. The ranking of evaluation criteria changes depending on the particular buying situation. Reliability and maintainability may be added as evaluation factors to the list of more standard factors such as cost, technical, and performance (Harnen, 1985).

Best value can be described as the approach that "gives the government greater flexibility and discretion to make trade-offs between cost/price and quality factors such as technical approach, management capabilities, and past performance" (Scott, 1995:3). It is a practice used by both the public and private business sectors. The difference is that best value criteria increases the risk of protest because it involves a subjective judgment while creating an environment in which all offerors have equal basis for competition (Scott, 1995:3).

Case-based decision theory (CBDT), an economic decision making theory which provides maximum utility based on memories of the past when faced with an infinite

range of uncertain outcomes, supports the use of past performance information. CBBT is more simply stated that past performance is a driver in present decisions (Gilboa and Schmeidler, 1995:608). CBBT was introduced as a way to delineate the uncertainty of the future into a resemblance of what has occurred in the past. In that respect, past performance information provides a source selection decision an assessment of each offeror's performance risk. Gilboa and Schmeidler recommend application of CBBT in consumer purchases based on firm reputations (1995:627, 628).

The trade-off relationship was also categorized into 10 combinations of buying situations with the most common criteria for each situation identified (Lehmann, 1982). Past performance criteria (referred to as "adaptive criteria") was ranked most common among standard, simple, high-dollar-commitment buying situations (1982:11). Also, the collection of past performance information should be specifically tailored to each type of acquisition (Brislaw and Dowd, 1996:18).

Past performance information has demonstrated its credibility as an evaluation factor in achieving best value. In a study of 300 major Air Force source selections, all but two resulted in actual contract performance the same as that predicted by previous past performance determinations (Norton, 1986:x).

The emphasis of past performance is visible in both the public and private sector of business (Sheth et al, 1983:8). However, the use of past performance information within industry is not comparable to that of the Government's size, scope and complexity (Little, 1996:5). However, industry exhibits some of the same past performance trends as the Government, as Little identifies the following commonalities in use of past performance information:

business area strategy and management, supplier approvals, quality system assessments, performance assessments, performance measurement feedback, supplier development and improvement initiatives, total cost assessments, item and part-level certifications, and recognition programs. (1996:6)

Therefore, it is possible to look to commercial practices for guidance in implementing the use of past performance information in Government procurements.

Although the use of past performance information is beneficial to achieving best value, its validity may be challenged. Dr. Kelman (OFPP Administrator of Federal Fiscal Policy) identifies the two most common complaints among contracting officers regarding the use of past performance (ARNet, 1996:4). First, past performance is an imperfect predictor of the future. However, both the public and private sectors have found this quality approach useful in achieving best value. The second most common criticism is that past performance information does not always apply to the proposal. Thus exists the need for accurate and valid relevancy determinations. A more defining critique considers relevance with respect to time. Dr. Kelman suggests recording past performance information over a three-year-span (ARNet, 1996:10). In addition, past performance evaluations should be applied to commodities (except commercial items) and some service acquisitions, but not for procuring major systems because of the lack of timely relevance to similar, forthcoming source selections of the same product (Little, 1996:87).

The past performance evaluation criteria has not normally been a major factor in the final award decision. An investigation of each evaluation criteria and its relationship with the final award decision was conducted using former Air Force Logistics Command source selections. Among all factors, past performance had the lowest correlation with the final award decision (Noffsinger, 1991:79-80). It may have been that all offerors had

decent past performance ratings, or that the collection methods are deficient (Noffsinger, 1991:79-80). The Little report also states past performance is “generally not a discriminator in the selection process” and estimates a 5 to 15% contribution to the award decision (1996:88).

Overview of the Source Selection Process

Because there is usually more than one method to deliver certain supplies and services, offerors are now provided with objectives and they return a proposal to fulfill these requirements. If price and other price related factors were the only evaluation factors necessary for these proposals, then the contracting method should be “sealed bidding.” However, if evaluation of these proposals should be made on the basis of evaluation factors besides price alone, then “contracting by negotiation” applies. “Source selection” is the avenue of contracting by competitive negotiation, as opposed to the other avenue, sole source acquisitions. It is a complex and thorough manner of procuring systems by means of evaluating proposals in terms of achieving the best value at a given price. Source selection is akin to a major personal purchase; one does not always choose a brand or a model based on price alone. In both situations, other evaluation factors are invariably represented in the final decision. This section will describe the source selection process in order to understand how evaluation factors such as the past performance criterion are used.

Statutory guidance for conducting source selections is provided in the *Air Force FAR Supplement, Appendix AA—Formal Source Selection for Major Acquisitions* and *Appendix BB—Source Selection Procedures for Other Than Major Acquisitions*. In both

types of acquisitions, the basic overview and the use of past performance is much the same.

Players involved in the source selection process include the Source Selection Authority (SSA), Contracting Officer (CO), Source Selection Advisory Council (SSAC), Source Selection Evaluation Board (SSEB), Source Selection Evaluation Team (SSET), and Performance Risk Assessment Group (PRAG). The designated official who makes the award decision is the Source Selection Authority. This person is advised through a group of senior Government officials, or the Source Selection Advisory Council. Together, they use the findings and proposal evaluations gathered by the Source Selection Evaluation Board for recommendations and key decisions. In a streamlined acquisition, the combination of the SSAC and the SSEB create the Source Selection Evaluation Team. Figure 1 represents a typical source selection organization.

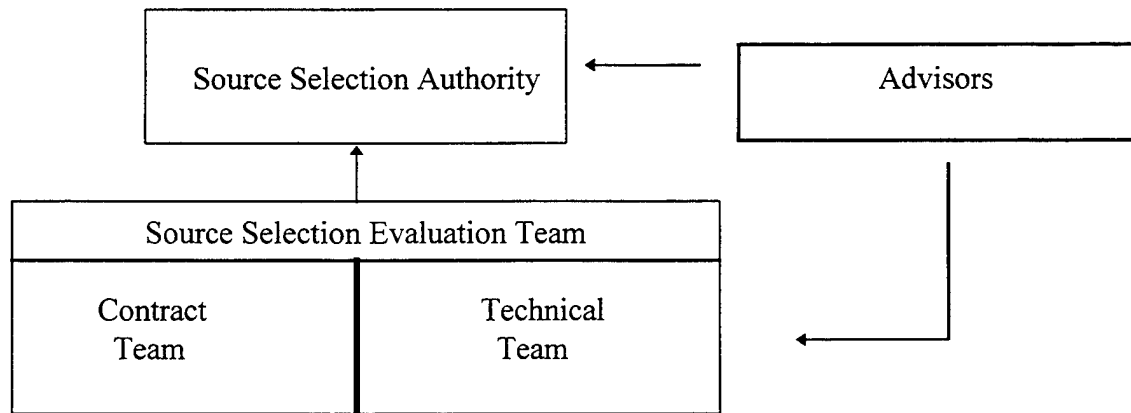


Figure 1. A Typical Source Selection Organization
(Adapted from AFFARS Appendix BB, 1996:BB-26)

A Source Selection Plan (SSP) is the guiding document for the SSAC and SSEB, or SSET. Approved by the SSA, the SSP instructs how "the proposals will be evaluated and analyzed, and how the source(s) will be selected" (AFFARS Appendix AA, 1996:AA-3). Among its minimum contents are the sections entitled "Evaluation Procedures" and "Evaluation Criteria." Thus, the SSP will specify the "evaluation and rating methodology" in the "Evaluation Procedures," and it will describe the cost criterion, specific criteria, assessment criteria, proposal risk, performance risk, and general considerations under the "Evaluation Criteria" section (AFFARS Appendix AA, 1996:AA-12).

As to the evaluation criteria used in the source selection, the Federal Acquisition Regulation provides instruction when making awards other than to the lowest-priced offeror. Under FAR 15.605, Evaluation Factors, the following guidance is provided for source selection methodology:

While the lowest price or lowest total cost to the Government is properly the deciding factor in many source selections, in certain acquisitions the Government may select the source whose proposal offers the greatest value to the Government in terms of performance and other factors. (1994: 15.605(c) , 30,134)

The best value concept is embodied in the established guidelines in the *Federal Acquisition Regulation*, which allows the evaluations to be based on "terms of performance and other factors" (FAR 15.605(c)). The regulation further states, "Past performance shall be evaluated in all competitively negotiated acquisitions expected to exceed \$100,000 not later than January 1, 1999" (FAR 15.605(b)(1)(ii)).

Evaluation criteria are the basis one-third of the evaluation, given they are stated in the solicitation. They are used to determine the factor assessment. The three types of

evaluation criteria are cost, specific, and assessment criteria. The cost criteria is mandatory but specific criteria are related to the specific program needs and characteristics and therefore used when they are applicable. If used, specific criteria are a subset of evaluation criteria and are “typically divided into technical and/or management evaluation areas. Examples of specific criteria might include areas such as technical, supportability, manufacturing, operational utility, design approach, readiness and support, test, and management” (AFFARS Appendix AA, 1996:AA-11). Assessment criteria are “used by evaluators in performing the technical evaluation by relating certain aspects of an offeror’s proposal to specific evaluation criteria” (AFFARS Appendix AA, 1996:AA-2). Examples of assessment criteria include “soundness of approach, completeness, and compliance” of the offeror’s proposal (AFFARS Appendix BB, 1996:BB-10). As stated, each of the three types of evaluation criteria are used to determine the factor assessment. In addition to (and on equal basis of) the factor assessment, are proposal and performance risks. The evaluation matrix in Figure 2 demonstrates that the factor assessment, proposal risk, and performance risk are used equally to evaluate any area of an offeror’s proposal. Proposal risks relate the risks associated with the offeror’s proposed approach. Performance risks are defined as “the assessment of an offeror’s present and past work record to assess confidence in the offeror’s ability to successfully perform as proposed” (AFFARS Appendix AA, 1996:AA-2). While proposal risks identify risks in the proposed approach, performance risk uses an offeror’s track record to assess a confidence level in the offeror’s ability to perform as promised.

The Air Force uses a color rating system for specific and assessment criteria. The colors are: Blue, or Exceptional (“Exceeds specified performance or capability in a

beneficial way to the Air Force”); Green, or Acceptable (“Meets evaluation standards”); Yellow, or Marginal (“Fails to meet evaluation standards”); and Red, or Unacceptable (“Fails to meet a minimum requirement” and the deficiency is not correctable) (AFFARS Appendix AA, 1996:AA-15). Proposal and performance risk are not rated in a color scheme, in contrast to the color system for specific and assessment criteria. These two risk types are rated amongst a high, moderate, and low spectrum. Figure 2 demonstrates this differentiation.

Factor N	Area X (e. g., Technical)
Factor Assessment	Green (Meets Standards)
Proposal Risk	Moderate (Potential Difficulties)
Past Performance	Low (Little doubt that the offeror can perform the effort)

Figure 2. Example of an Evaluation Matrix
(Adapted from AFFARS Appendix AA, 1996:AA-31)

Proposal risk relates the proposed approach to the assessment and specific criteria. A high proposal risk rating implies the proposal is prone to cause significant schedule delay, increased costs, or poor performance even with close contractor monitoring. A moderate risk rating signifies potential difficulties in schedule, cost, or performance. Special contractor monitoring by the Government may overcome these difficulties. A

low rating represents little potential for these difficulties. It implies normal contractor monitoring will probably overcome difficulties.

Performance risk relates cost and specific criteria and these ratings are based on the offeror's past and present performance record. A high performance risk rating implies significant doubt that the offeror can perform the proposed effort. A moderate performance risk rating implies the some doubt exists as to the performance of the proposed effort. A low rating projects little doubt that the offeror can perform the effort. An additional category, not applicable, implies no significant performance record is identifiable.

In regards to past performance, AFFARS Appendices AA and BB recognize that performance risk evaluation is vital to the award decision. The policy for past performance dictates that "the assessment of past performance (1/3) is of equal importance to either factor assessment (1/3) or proposal risk (1/3)" (1996:AA-4). The policy further emphasizes "the Air Force's commitment to award only to contractors who will carry through with what they promise in their proposals" (1996:AA-4). Rationale for using past performance is stated as to "prevent awards to habitually poor performers, and reduce the incidence of associated schedule slips and increased costs" (1996:AA-4).

An evaluation matrix graphically displays the factor assessment, proposal risk, and past performance. The matrix shows that each of these aspects are given the same weight. In Figure 2, the evaluation matrix indicates that for the technical area, the assessment meets standards, the proposal bears moderate potential for difficulties, and small doubt exists that the offeror can perform the effort.

Once the Best And Final Offers have been submitted and the evaluations have been completed, the SSEB chairperson briefs the SSAC with a written presentation, or the Proposal Analysis Report (PAR) (AFFARS Appendix AA, 1996:AA-20). The PAR documents the results of the technical evaluation, risk assessments, cost analysis, contract issues, SSAC analysis, findings, and rationale (AFFARS Appendix AA, 1996:AA-2). It contains evaluation elements including the proposal ratings, proposal risk assessments, performance risk assessments, and comments of proposal strengths and weaknesses. The SSEB chairperson also provides an oral presentation which should include assessments of the technical evaluation, cost analysis, general considerations, performance risk, and the SSAC's overall independent comparative analysis of the proposals (AFFARS Appendix AA, 1996:AA-21).

A case study highlighted the power of the SSA's decision, particularly when the SSA is presented with erroneous information and decides against a contractor with an inaccurate performance record. Though the contractor's past performance record was incorrect, the case summarized the discretion and finality of the SSA's decision (Witte, 1989:38). The resolution of the case was that the SSA made a rational decision at the time of the source selection and his judgment was upheld based on these facts (1989:38).

After the SSA has made the award decision, debriefings are held with each offeror. Disclosing of the past performance information to the offeror ensures fairness, provides the offeror steps towards continuous improvement, and fosters better supplier relationships. It is not necessary to disclose to the offeror the exact source from where the past performance information was collected.

Performance Risk Assessment

A source selection is conducted to select the offeror with the best value proposal. Another function is to make the selection with confidence that the offeror has the ability and willingness to deliver what has been promised in the proposal. An evaluation of past performance involves three aspects: a) objective facts of the contractor's history; b) subjective judgments about how well the contractor satisfied the customer; and c) subjective judgments about the information's relevance (Edwards, 1995:25). It indicates a confidence that the offeror will perform as promised in the proposal. This confidence is conventionally known as the performance risk assessment.

Regulatory guidelines for assessing performance risk comes from the Air Force FAR Supplement. All assessments will recognize the "number and severity of problems, the effectiveness of corrective actions taken, and the overall work record" to measure how well a contractor will overcome difficulties upon close Government monitoring (1996:AA-16). Also considered is the contractor's demonstrated ability to identify and correct program risks. Performance risk will be tailored to cost and specific criteria, and will be discussed separately in the evaluation briefings.

Past performance information only indicates the contractor's demonstrated actions. Arthur D. Little, Inc. categorizes past performance information as the record of specification conformance, cost maintenance and forecasting on cost reimbursable contracts, delivery schedule compliance, history of behavior, and established concern for the customer (1996:12). Dr. Kelman, OFPP Administrator of Federal Fiscal Policy, suggests that for those contractors large enough to contain divisions or profit centers,

consideration of past performance information should reflect only the particular division or profit center who will perform the work on the contract (ARNet, 1996:16). General categories of demonstrated past performance have been outlined by Dr. Kelman. This list includes quality, timeliness, cost control, cooperation with the contracting officer, customer satisfaction, and key personnel's management of the contract (ARNet, 1996:14). Dr. Kelman also outlines the categories of contractor performance information that are required for records on every contract exceeding \$100,000. The categorization is described in Figure 3.

Quality	Conformance to specifications and standards of good workmanship
Cost Control	Containment and forecasting of costs
Timeliness	Adherence to contract schedules, including administrative aspects
Business Relations	History of reasonable behavior and overall concern for the customer
Customer Satisfaction	Service to the end user of the product or service
Key Personnel	How long they stayed on the contract; how well they managed their portion

Figure 3. Categories for Recording Past Performance Information
(Adapted from ARNet, 1996:9 and 35)

The Contractor Performance Assessment Report, which systematically assesses contractor performance for acquisitions greater than \$5 million, also categorizes past performance information. These categories of performance assessments include management responsiveness, schedule control, technical performance of product, product assurance (both quality system and manufacturing management), program/data management, procurement/subcontract management, logistics support/sustainment, engineering (both system and software engineering), and unique technical performance/other areas (AFMCI 64-107, 1996:Attachment 1).

Past performance information is collected for two different uses. Information is collected by procurement agencies during a local source selection, and it is also collected for future uses (Little, 1996:64). Figure 4 demonstrates how past performance information is collected for these two different uses.

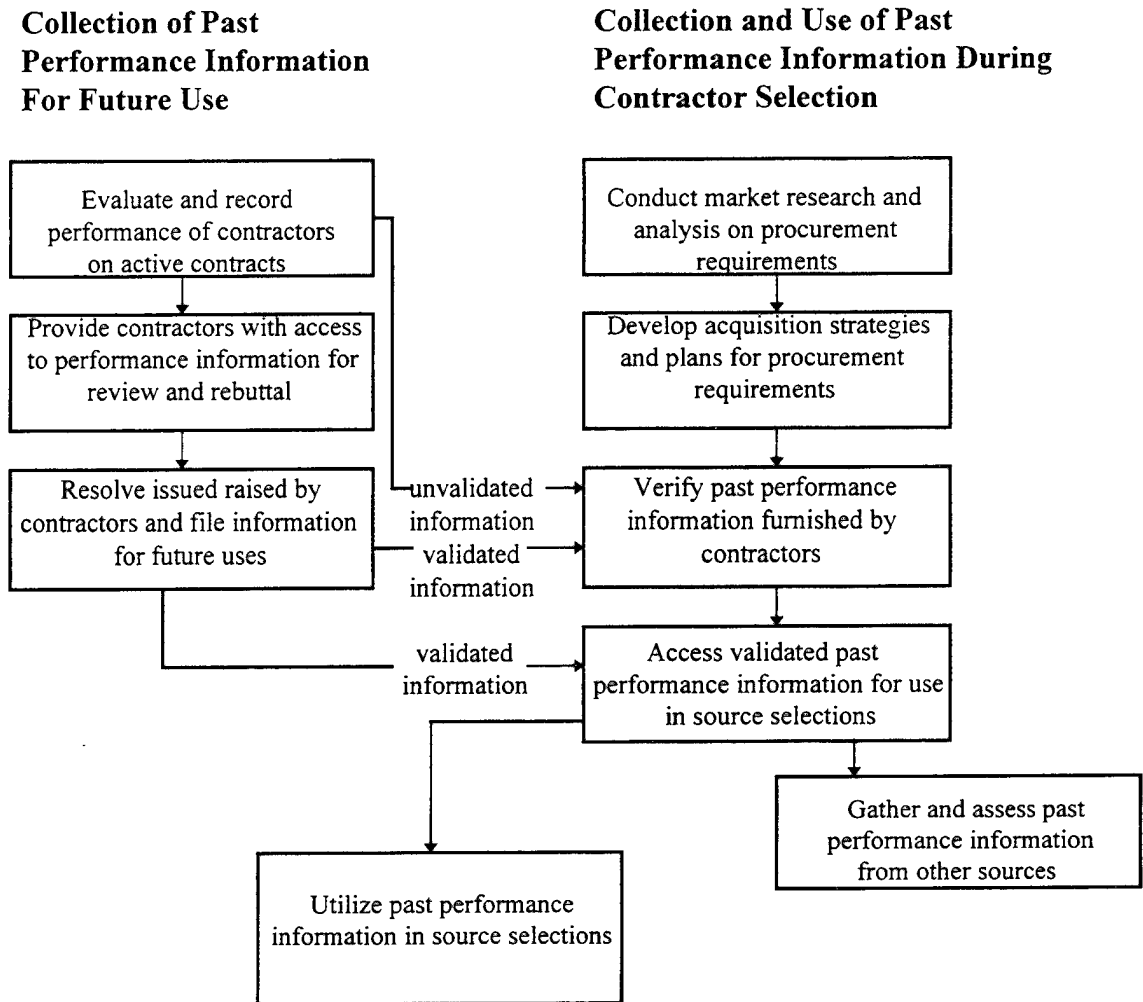


Figure 4. Two Different Treatments of Past Performance Information
(Adapted from Little,1996:64)

In either circumstance, the past performance information shall be treated as sensitive source selection information and is not releasable under the Freedom of Information Act.

Past performance information can be used in source selections and for responsibility determinations. However, a responsibility determination cannot be used to

assess performance risk. A responsibility determination implies that the contractor has a “satisfactory performance record” (FAR 9.104-1(c)). It ensures that the offeror has the capability to perform and screens out the non-responsible offerors who do not have it. Using performance risk assessments during a source selection provides a competitive method to compare each offeror’s track record with other responsible offerors in determining which one will provide the best value.

The Performance Risk Assessment Group (PRAG) was established as a Government’s response to commercialize the practices involved in source selections. The U. S. Army uses a PRAG which is very similar to the Air Force version (Dept of Army “Past,” 1996). Usually consisting of one chairperson (Lieutenant Colonel or GS equivalent) and two assistants, the PRAG is a temporary group assigned with the responsibility of performing the source selection’s performance risk assessment. The overall process involves subjective judgment and imprecise methodology. PRAG members should have cost, procurement, and/or technical backgrounds. The PRAG separately briefs the SSAC or SSET Chairperson. All PRAG’s usually follow the following same steps: planning, obtaining data, supporting the competitive range briefing, compiling and evaluating information, assessing risk, identifying concerns to the contracting officer for discussions, and briefing the SSA (Thurston, 1989:4-2). If past performance information from contracts performed on federal, state, or local contracts are not available, then PRAG members should use commercial contracts if practical.

Sources of Past Performance Information

During the source selection, past performance information can be obtained through a myriad of sources. Three types of information sources that are used throughout the federal government are: appraisal, tracking, and certifying systems (Little, 1996:14). Performance appraisal systems contain contractor evaluations; tracking systems contain quality and delivery data; certifying systems establish specific criteria and maintain a list of contractors who have demonstrated the criteria in previous work. Brislawn and Dowd cite that a single source of past performance information is not an adequate indicator of the contractor's past performance history (1996:18). Instead, they list multiple sources of past performance information to include: contract completion evaluations, performance ratings from CPARS or DPRO's, contractor self-assessments, user and buyer evaluations, and performance qualifications and/or certifications (1996:18). An outline of available information sources includes the "offeror's proposal, Contractor Performance Evaluation Program (CPEP) reports, Contractor Performance Assessment Reports (CPARS), the Acquisition Management Information System (AMIS), and the Defense Logistics Agency (DLA) contractor profile system" (Biddy, 1995:6). The PRAG members also use interviews and questionnaires to extract past performance information. Among the documents for past performance risk determinations, Noffsinger noted the use of "1) the findings of the PRAG; 2) the Contractor Responsibility Review Program; 3) CPARS; 4) questionnaires; 5) interviews; 6) pre-award surveys; and 7) reviews of contractor performance on similar contracts" (1991:63). Financial reports may also provide

information of the offeror's stability/instability or strengths/weaknesses (Edwards, 1995:37).

The major steps of obtaining past performance information are geared towards collecting information and then validating it. Little cites the following five most common steps of obtaining past performance information through existing systems: 1) evaluating and recording performance; 2) providing contractors an opportunity for rebuttal; 3) receiving contractor rebuttals; 4) reviewing the rebuttal and resolving the evaluation; and 5) filing all information as "Source Selection Information" for use within a three-year period (1996:9).

The Contract Performance Assessment Reporting System (CPARS) was also developed as an manual contractor performance tracking system. Used by Air Force Materiel Command, it is a database for "systematically assessing contractor performance on current system acquisitions greater than \$5 million" (AFMC Instruction 64-107, 1996:1). The purpose of the CPARS is to facilitate an on-going database kept at Air Force Product Centers by CPAR focal points for responsibility determinations, formal, and informal source selections. CPARS is updated every twelve months. A contractor's record in the CPARS will include objective facts such as those generated by cost performance reports, schedule compliance, customer complaints, quality reviews, production management reviews, functional performance evaluations, and subcontract management. The entry will also include a subjective explanation as to the cause of the negative remarks. The Government and the contractor's perspectives are presented on the same form, but the evaluations are not subject to the "Disputes" clause nor appeals.

Dr. Steven J. Kelman states that contracting agencies must establish a review procedure for contractors' comments that is at least one level above the contracting officer and resolution is up to the contracting agency (1996:9).

Another source of past performance information is the Contractor Performance Evaluation Program (CPEP). This is a contract administration program which stores contractor performance information during and after the completion of contracts. Contractors are given an assessment twice a year. CPEP applies to contracts between \$2 million to \$5 million (Biddy, 1995:12).

PRAG members must make the effort to find contracts not listed in the offeror's proposal as additional sources of performance history. Contracts previously held by the contractor can be found through the Acquisition Management Information System (AMIS). This automated database contains contract information with respect to number, title, and dollar amount for all corporations on contract with AFMC (Biddy, 1995:12). The Federal Procurement Data System (FPDS), managed by the General Services Administration, serves as another source of each offeror's federal contract history. The FPDS keeps award information reported on a Standard Form 279 or DD 350 for every contract in excess of \$25,000 (Edwards, 1995:37 and FAR 4.6). Legal databases such as LEXIS or WESTLAW may also serve as an information source for contractors currently involved in litigation.

The Contractor Profile System (CPS) at the Defense Logistics Agency (DLA) is another past performance system currently available, but its expected replacement is the Defense Contract Management Command Service's Contractor Information Service (CIS). The current CPS is a broad database useful for sharing information within the

services and contains "data on production, quality, contract administration, financial services, engineering, property, procurement, and legal" (Biddy, 1995:12).

The DLA also has systems which serves a notice to Contracting Officers that a condition exists needing consideration prior to award. The Contractor Alert List (CAL) is a list of contractors who were placed in the Contractor Improvement Program (CIP) or recommended by DCMC for a pre-award survey (Biddy, 1995:12). The DLA Quality Alert List identifies contractors who have not corrected a problem within their inspection system or quality system (Biddy, 1995:13). Contractors are on this list until the identified problem has been resolved.

The primary means of collecting information for the lower dollar acquisitions is through interviews and questionnaires. However, these methods are time-consuming methods for gaining past performance information from each offeror. Questionnaires generate factual information from the offeror related to past contracts (e. g. number, dollar amount, points of contact) and subjective information related to their experience (e. g. a unique technical aspect related to the proposal, or reasons for a schedule slip). The follow-on interviews given to various respective, knowledgeable government personnel are more extensive and practical to the final risk assessment (Biddy, 1995:36-37). Questions regarding the technical aspects normally invoke the respondent's subjective assessment of the contractor's methodology, test program, and logistics support capability. Reliability, maintainability, and producibility are also usually probed. Each offeror is also assessed in areas such as management of contract requirements, subcontractors, and evaluation change proposals, support to Government personnel, and

adherence to small or disadvantaged business goals. Questions regarding schedule and cost goals and the reasons for not meeting these goals are also often asked.

Certain strengths and weaknesses exist in the attempts to extract performance information. The most troublesome area is usually questionnaires and interviews. The problems encountered involve the amount of time to locate the right person to survey/interview, respondent reluctance to phone interviews, inability to ascertain respondent objectivity, and ineffectively communicating the questions (Thurston, 1989:4-7). Moreover, the most difficult challenge is finding sufficient reliable information to make an intelligent assessment of an offeror's performance risk (Edwards, 1995:60).

Relevancy Determinations

Once the fact-finding is complete, it is important for the PRAG to determine if the information is relevant. Relevancy is defined as "How closely the skill demonstrated in the prior contract, e. g., subcontract management, matches the degree to which that skill will be utilized on the new contract" (AFMCPAM 64-113, 1995:6). Subjective ratings of Relevant, Somewhat Relevant, and Not Relevant are used to underscore the relevancy of the past performance information to the Government's requirement at hand (Biddy, 1995:11). The contractor's relevancy rating should be reflected in the overall performance risk assessment.

Problem Restatement

How have AFMC acquisition professionals been implementing past performance in their source selections between \$1,000,000 and \$5,000,000? Moreover, what

suggestions can be made to improve the process? In order to answer, the following questions need investigation: What methods of collecting, storing, and protecting past performance information are currently being practiced? What kinds of past performance information have been used? How do they determine the information's relevancy? Essentially, what are the similarities and differences between past performance information systems for the lower-dollar acquisitions? With the answer to these questions, a foundation can be made for developing a policy for the implementation of past performance practices in the \$1 million to \$5 million acquisition range.

III. Research Methodology

Introduction

As discussed in Chapter 2, the past performance criterion has demonstrated itself as an effective indicator of best expected value for reasons such as evaluating performance risk, improving contractor performance, and providing more effective management of contractor performance. Chapter 2 also discussed how the Air Force established the Contractor Performance Assessment Reporting System (CPARS) as a centralized database for storing past performance information on acquisitions above \$5 million. However, there is no guidance for collecting past performance information for acquisitions below this amount. Therefore, it is hypothesized that some work centers are collecting the information for “in-house” purposes. Literature research indicates that the value of past performance information decreases as a past performance system is standardized and therefore the system should be kept at the agency level. Furthermore, past performance information should reflect each acquisition’s business area. This research effort will investigate the similarities and differences among procedures for implementing past performance evaluation requirements for the lower dollar acquisitions.

Objectives

Chapter 1 introduced the following investigative questions: How are the Contracting Officers storing their past performance information?; How are the Contracting Officers protecting the past performance information?; How are the Contracting Officers making their relevancy determinations?; What sources of collecting past performance information are being used?; What questions are being asked when

collecting the information?; and What similarities and differences exist between past performance information systems? The answers to these questions will reveal the past performance evaluation procedures currently used for the lower dollar acquisitions by AFMC work centers. It is hypothesized that there is no standard information system to handle past performance information. An analysis will investigate the similarities and differences between the past performance information systems. From this analysis, suggestions will be made for future, lower dollar AFMC acquisitions.

These investigative questions lead to the following six objectives for understanding the implementation of past performance information and evaluations in acquisitions under \$5 million:

Objective #1: Storing the Information;

Objective #2: Protecting the Information;

Objective #3: Relevancy Determinations;

Objective #4: Sources of Past Performance Information;

Objective #5: Past Performance Information Types; and

Objective #6: Similarities and Differences Between Past Performance Information Systems.

Objective #1: Storing the Information

Since the collection of past performance information is not regulated with a systematic, centralized database such as the Contractor Performance Assessment Reporting System (CPARS), the work centers must store their past performance information in a de-centralized database. As stated earlier, there is no regulatory guidance to follow for the collection of past performance information below \$5 million.

Through interviews, this objective will describe the various commonalities and differences in the methods that the contracting professionals have been using to store the information. It will test the hypothesis that some work centers have constructed their own “in-house” database. It will also describe how often information is input, updated, or removed. It is further necessary to probe reasons against the decision to maintain an “in-house” database.

Objective #2: Protecting the Information

The CPARS regulation mandates that “All Contractor Performance Assessment Report forms, attachments, and working papers must be marked ‘FOR OFFICIAL USE ONLY/SOURCE SELECTION INFORMATION’ (AFMCI 64-107, 1996:6). Thus, the CPARS regulation specifies that past performance information must be kept confidential, but what are the specific protection methods for acquisitions under \$5 million? The questions, “Who has access to input information?” and “Who has access to retrieve information?” are necessary to identify specific protection methods. The question, “Do contractors have the opportunity to review their files?,” was asked to identify if a difference exists between those work centers who lean towards protection and those who invite contractors to review their performance information. The purpose of “What is your policy towards another work center asking you for information on a particular contractor?” is to understand the nature of sharing past performance information among AFMC work centers. Interviews were used to glean protection methods and issues.

Objective #3: Relevancy Determinations

A relevancy determination is a measure taken to match the degree to which an offeror's past performance matches the skill required under the new contract. It is not assumed that the function of performing relevancy determinations remains the same as that for the higher-dollar acquisitions. Different criteria may apply. Generally, acquisitions above \$5 million involve more unique requirements rather than commercial products or services. It is the interest of this objective to establish which criteria are useful in performing relevancy determinations for the lower dollar acquisitions. The buyers and contracting officers face certain challenges in regards to using relevant information during evaluations. Therefore, it is of interest to present these challenges to understand the decision to implement a database or to gather past performance information through other means. Interviews were used to describe commonalities and differences.

Objective #4: Sources of Past Performance Information

Before establishing what specific information is used in performance evaluations, the sources first need to be identified. It is hypothesized each information source is useful to some but not all work centers in collecting past performance information. The hypothesized sources were derived from a combination of literary sources documented in Chapter 2. The sources actually used by AFMC work centers were obtained by using interviews. The interview was conducted in accordance with Appendix A.

Objective #5: Past Performance Information Types

This objective explores the commonalities and differences in past performance information types among the various work centers and answers the question: What kinds of past performance information are used in evaluations? The work centers have devised their own methods of collecting and using past performance information since no guidance exists for acquisitions less than \$5 million. It is hypothesized that the work centers use the same past performance information types as categorized in the CPAR format combined with Dr. Kelman's (OFPP Administer of Federal Procurement Policy) list of information types.

These five objectives present an outline of how AFMC work centers are handling past performance in the \$1 million to \$5 million acquisition range. This outline covers the storage and protection methods along with a review of useful information types, sources, and relevancy criteria. The first five objectives provide a baseline for defining, understanding, and referencing how AFMC, in general, has responded to past performance practices. This leads to Objective #6, which will answer the question: Are some work centers finding different means to handle past performance information?

Objective #6: Similarities and Differences Between Past Performance Information Systems

It is hypothesized that several, but not all, work centers have constructed an in-house database to collect and maintain their own repository of past performance information. The variance surrounding this decision on storing the information may imply that subsequent decisions (i. e., protecting the information, relevancy, information

sources and types) differ as well. The following independent tests were performed to delineate the similarities and differences among the various information systems used by AFMC work centers:

Test A: Do the information systems offer the contractor an opportunity to review the information?

Test B: Do the information systems provide the same level of authorization to input or retrieve information?

Test C: Do the information systems use the same relevancy criteria?

Test D: Do all work centers use the same sources of past performance information regardless if they use an in-house database or not?

Test E: Do the information systems use the same past performance information types?

Indexing the Results for Analysis of Similarities and Differences Between Past Performance Information Systems

Tests A through E in Objective #6 concern the similarities and differences past performance information systems. In order to analyze these tests, it is necessary to sub-categorize each of the tabulated answers (from the interview questions for the first five objectives) to the five tests under each respective information system. An analysis of these similarities and differences was performed by using independent tests with an indexing system.

The Non-numerical Unstructured Data Indexing Searching and Theorizing (QSR NUD*IST) software is useful in “handling non-numerical and unstructured data in

qualitative analysis” (QSR NUD*IST, 1996:2). The software was used to create an indexing system for analyzing the results from Objectives #1-#5. The index is similar to a database in that it links categories and sub-categories such as past performance information types with each respective source. This software was used to test similarities and differences among the various information systems used by AFMC work centers.

The Sample

Eleven contracting personnel among AFMC product centers and air logistics centers were interviewed. Points of contact were provided by HQ AFMC to help identify respondents who would be the most knowledgeable about past performance and its implementation within their organization. Certain points of contact could not be located (e. g., relocation to a new position). In this event, a Contractor Performance Assessment Reporting System (CPARS) focal point was sought. If that was not feasible, more than one interview was conducted for that work center. All interviewees are knowledgeable about how past performance policies have been implemented within their work center. The interviewees are Government civilian employees with five to twenty years of contracting experience. About half of these people serve as the CPARS focal point. The Air Force Material Command is represented with two product centers’ and five air logistic centers’ participation in this research effort. Two product centers did not participate because they do not perform acquisitions within the \$1 million to \$5 million range. These centers were identified by HQ AFMC. The actual work centers who participated in this research effort are anonymous. No work center will be singled out in regards to the policies or decisions they have implemented. This aspect was explained to

each of the interviewees in the course of providing an open dialogue rather than an inquisition.

Interviews

For each of the first five objectives, the interview technique is most appropriate and feasible. Interviews are appropriate for obtaining data which represents actual policies and the respondents' beliefs and feelings about them (Silverman, 1993:91,92). They are also appropriate for "specific questions related to actual rather than hypothetical situations" (Silverman, 1993:92). The purpose of this research effort is to identify how AFMC work centers have implemented past performance information systems within their work center. It is also necessary to discern what information sources and types are considered "useful" for the \$1 million to \$5 million acquisition range. Therefore, interviews are appropriate.

Interviews are used as a qualitative research method for two different positions: Positivism and Interactionism (Silverman, 1993:90,91). Through positivism, an interview provides facts about behavior and attitudes by tabulating multiple-choice answers to standardized questions (Silverman, 1993:91). A few of the questions listed in Appendix A obtain data this way (e. g., Is the information stored electronically or manually?; Does a contractor have the opportunity to review the file?)

Interactionism is an interview position which serves to obtain the respondents' insights by using unstructured, open-ended questions (Silverman, 1993:91). Most of the interview questions listed in Attachment A serve this purpose. Open-ended questions were used in providing unique, in-depth data from the respondents (e. g., What challenges

do you face?). However, using these types of questions limits reliability and validity unless the researcher introduces passivity while eliciting the response (Silverman, 1993:96). Therefore, each question was read as it was worded in Appendix A. To a small degree, some questions needed further background to accurately pose the same query to each respondent.

Because interviews involve an interactive flexibility with the respondents, overall reliability and validity may be subject to challenge. A standardized protocol was used to minimize this flexibility (Silverman, 1993:92). The respondents were each given the same interview (See Appendix A). Questions were read in the sequence listed in this attachment. When feasible, interviews were tape-recorded at the respondents' office with their permission. The purpose of the tape recorder is to offer more reliable transcription of the data for coding and analyses. The respondents were each given the opportunity to turn off the tape recorder at any time they chose or to turn off the recorder completely. Most of the interviews were conducted over the telephone as time and funding limited the capability to visit each respondent at their location. The details of the interview were confirmed with the respondents and then the transcripts were coded and analyzed.

Interview Questions

The questions found in the interview format, Appendix A, were selected to compare the data's relationship with AFMC Instruction 64-107, Contractor Performance Assessment Reporting System (CPARS). A relationship to this regulation was deemed appropriate in that this regulation best provides guidance for implementation of past

performance policies (even though it applies to acquisitions over \$5 million). This section will describe how each interview question was selected.

A. Storing the Information.

Question #1: What exactly is being stored in your past performance files?

Question #2: Is the information stored manually or in electronic form?

These questions were selected to find learn how the AFMC work centers are storing their past performance information. Through discussions with the HQ AFMC policy officials and with other experienced contracting personnel, it was anticipated to find either an “in-house” database or predominant use of questionnaires as a means of storing past performance information.

Question #3: How often is past performance information input into a contractor’s file?

Question #4: How often is the information updated?

Question #5: How often is the information removed?

Questions #3 - #5 were asked to discern the age of information that is used for past performance evaluations in the \$1 million to \$5 million acquisition range. These questions will be compared with the CPARS regulation.

Question #6: How are contractor name changes handled?

Question #7: How are contractor mergers handled?

Question #8: Is there a program manager summary similar to that of the CPAR form?

Question #9: Are there other actions necessary to store past performance information?

These questions were selected to answer other storage issues. Name changes and mergers are expected to occur during this acquisition range so it is necessary to learn how the AFMC work centers are handling these events with regards to storing their past performance information. The program manager summary was a key change to the CPARS form for the Air Force's Lightning Bolt #6 so it is interesting to note if the same change was reflected for acquisitions under \$5 million. Question #9 was added to offer the opportunity to the interviewees for any further comments. It is an open-ended question with the purpose of extracting data may not necessarily have been mentioned in response to Questions #1 - #9.

B. Protecting the Information.

Question #10: What measures are done to ensure proper protection of the information?

Question #11: Who is authorized to input information in a contractor's file?

Question #12: Who is authorized to retrieve information from a file?

These questions address the general protection methods implemented by the various AFMC work centers as well as the specific authorizations provided to those who input and/or retrieve past performance information.

Question #13: What is your policy towards another work center asking you for information on a particular contractor?

Question #13 was included for two reasons: 1) To test if information sharing exists between the work centers as it is expected that no single work center can feasibly contain past performance information on all prospective contractors; and 2) To

understand the nature of their responses towards another work center requesting past performance information.

Question #14: Does a contractor have the opportunity to review the file?

Asking the work centers if they provide their contractors an opportunity to review the file gains an understanding of whether they prefer protection methods over the value of more accurate information. The CPARS regulation mandates an opportunity must be provided to the contractors for rebuttal purposes. However, the decision is unguided for acquisitions below \$5 million. Some work centers may provide the rebuttal opportunity while other may prefer to keep stricter protection methods.

C. Performing Relevancy Determinations.

Question #15: For what kinds of requirements are you keeping information?

Before asking the work centers about their relevancy criteria and information needs, it is necessary to test if they have similar contract requirements. If they do, then comparisons will be more effective. If they do not have similar contracts then, logically, dissimilar contract requirements implies the possibility of dissimilar relevancy criteria and information needs.

Question #16: What criteria do you use in performing a relevancy determination?

Question #16 is the focus of Objective #3: Performing Relevancy

Determinations. It is necessary to discover the most useful relevancy criteria for the acquisition range of \$1 million to \$5 million.

Question #17: What challenges do you have in performing relevancy determinations?

This next question is open-ended and is included for the purposes of gaining the work centers' opinions about their relevancy needs. By identifying the challenges they face when performing relevancy determinations, an understanding is provided of the peripheral issues surrounding the decision to maintain a database or gather past performance information through other means.

D. Sources of Past Performance Information.

Questions #18 - #29 depict the variety of past performance information sources as discussed in Chapter 2. Multiple literary sources were used to develop this collage.

E. Past Performance Information Types.

Questions #30 - #42 combine two models of past performance information into a mutually exhaustive collection of information types. This combination is derived from Dr. Kelman's list and the categories found in the CPARS form.

Content Validity

The interview questions found in Attachment A have been selected to satisfy concerns of HQ AFMC, confirm or reject propositions of previous literature, and to learn about the differences in past performance information systems. The questions found in “Storing the Information” and “Protecting the Information” were raised during discussions with the sponsor. The questions in “Performing Relevancy Determinations” were selected to learn more about relevance (very little has been written about it) and to test if there are differences in relevancy needs among various information systems. “Sources of Past Performance Information” and “Past Performance Information Types” are necessary sections to discover the useful sources and types of past performance information.

Reliability surfaces as an issue through proper selection of the categories used in content analysis (Silverman, 1993:148). In other words, “These categories should be used in a standardized way, so that any researcher would categorize in the same way” (Silverman, 1993:148). The categories related to the sources of past performance information were derived from a consensus of research literature that outlined these categories. The categories of past performance information types were derived from a combination of categories found in AFMC Instruction 64-107, Contractor Performance Assessment Reporting System (the regulatory guidance for acquisitions over \$5 million) and in Dr. Kelman’s (OFPP Administrator of Federal Procurement Policy) past performance guidebook. As for the questions in the other objectives (#2, #3, and #5),

they came from discussions with HQ AFMC past performance experts, the CPARS regulation, and other literature research.

Summary

As no guidance presently exists for the implementation of past performance information systems and its surrounding policies, it is hypothesized that some work centers have implemented their own “in-house” database to collect and maintain the information. From the decision to store information “in-house” stems the decisions regarding protection. It is the second objective that ascertains the authorization of inputting and retrieving information. Once past performance information is stored and protected, relevancy is a filter that determines if it will be used in subsequent acquisitions. Objective #3 determines the major relevancy criteria that are used by AFMC work centers that affects the information. The next two sections, Objective #4 and #5, reveal the sources and types of information that are being used as it is imperative to know from where the information comes and what it looks like. While others may not have constructed an “in-house” database, it may be implied from this variance that similarities and differences exist in the approaches surrounding past performance information. It is Objective #6 that performs tests to see if subsequent similarities and differences exist among different levels of protection, application of relevancy criteria, and use of other information sources and past performance information types.

Interviews provided the data necessary for these objectives. The interview respondents included hand-picked contracting personnel by HQ AFMC. These subject-matter experts have sufficient knowledge, expertise, and experience to offer an account of

their work centers' implementation of past performance procedures. By pooling the interview transcripts, an analysis will provide similar and contrasting methods with AFMC. As a result of this analysis, the decision on whether to create a past performance database or not will be better understood.

IV. Results

Introduction

Eleven contracting professionals participated in this research effort. All of these people are Government civilian employees with five to twenty years of contracting experience. About half of these people serve as the Contractor Performance Assessment Reporting System (CPARS) focal point. All interviewees are knowledgeable about how past performance policies have been implemented within their work center. They represent seven different AFMC work centers. Two product centers and five logistic centers provided the data necessary for research in past performance policies for the \$1 million to \$5 million acquisition range. Each of the contracting personnel were interviewed in accordance with Appendix A. Their answers are tabulated by work center according to each interview question listed in this attachment.

Objective #1: Storing the Information

In the absence of the Contractor Performance Assessment Reporting System (CPARS) to store contract information under \$5 million, the work centers may have created their own "in-house" database. However, no regulatory guidance exists surrounding this decision and the decisions related to its maintenance. This objective describes the various commonalities and differences in the methods that the contracting professionals have been using to store the information. Out of seven work centers, four have created such a database while the other three centers' method is predominant use of questionnaires for each acquisition. Table 1 displays the various work centers' approaches to a past performance information system as the results of Questions #1 - #3:

Table 1. Past Performance Information Systems Used By AFMC Work Centers

Organization	Method of Information System	Manual or Electronic
A, B, and C	Use questionnaires predominantly and do not have a database.	Manual.
D	Has a repository of quality assurance reports and other records of contractor performance.	Manual.
E	Has an unofficial CPARS-formatted database.	Electronic
F	Keeps records of complaints or good comments about current contractors at the operational level and a database of contract history at the central procurement level (but this is used primarily for responsibility determinations).	Manual at operational level but electronic at central.
G	Maintains a database of contract history (but this is used primarily for responsibility determinations).	Electronic.

In summary of Table 1, all seven work centers generate new information for each source selection or exercise of an option. (Three work centers send new questionnaires for each new acquisition as their predominant means of collecting past performance information.) Four other work centers gather new information anytime it becomes available, as in the case of quality assurance surveillance reports (e. g., deficiency reports or delivery reports).

Objective #1 also describes how often information is input, updated, or removed. As shown below, those work centers who maintain a database input information at about

the same frequency, but they differ among each other in how often they update or remove it. The following results are displayed under each interview question pertaining to storing the information (i. e., the questions are from Appendix A):

Question #4: How often is the information updated?

Three work centers do not update their information because they generate new questionnaires for each acquisition. One work center undergoes an annual review of the information. Another work center undergoes a 5-6 year update. Another work center updates new information with each new acquisition. Another work center did not comment.

Question #5: How often is the information removed?

This is not applicable for those that predominantly rely on new questionnaires for each acquisition. Two work centers do not remove the information. Another work center removes information at a 5-6 year cycle. Another work center did not comment.

Question #6: How are contractor name changes handled?

Four of the seven work centers answer "Not Applicable" (three of these four predominantly use questionnaires). Two work centers' automated databases have a mechanism to recognize name changes. Another work center tries to isolate key individuals.

Question #7: How are contractor mergers handled?

Three of the seven work center answer "Not Applicable" (two of these three predominantly use questionnaires). Two work centers' automated databases have a mechanism to recognize mergers. Two other work center tries to isolate key individuals.

Question #8: Is there a program manager summary similar to that of the CPAR form?

Four work centers find this not necessary (three of these four predominantly use questionnaires). Of three work centers who maintain performance information in some form of repository, two include a program manager summary but one does not.

Question #9: Are there other actions necessary to store past performance information?

1. Two work centers would like to implement a CPARS-formatted database but they currently do not have one.

Three of the seven work centers responded to this question with their challenges:

2. Information is not updated enough;
3. The system does not allow for buyer or program manager inputs;
4. There must be a mechanism to keep the information-gathering process standardized;
5. They are unable to find a centralized location to archive past performance information;
6. They do not have the time to record and store past performance information;
7. Contractors in general are expecting the use of the CPARS system and they are surprised to find that CPARS will not be used for their source selections; and
8. Contractors in general are complaining about too much variance from one organization's proposal to another.

Objective #2: Protecting the Information

The CPARS regulation specifies that past performance information must be kept confidential, but what are the general protection methods for acquisitions under \$5 million? This is Question #10 from the interview. Figure 5 shows how AFMC work centers protect their collection of past performance information:

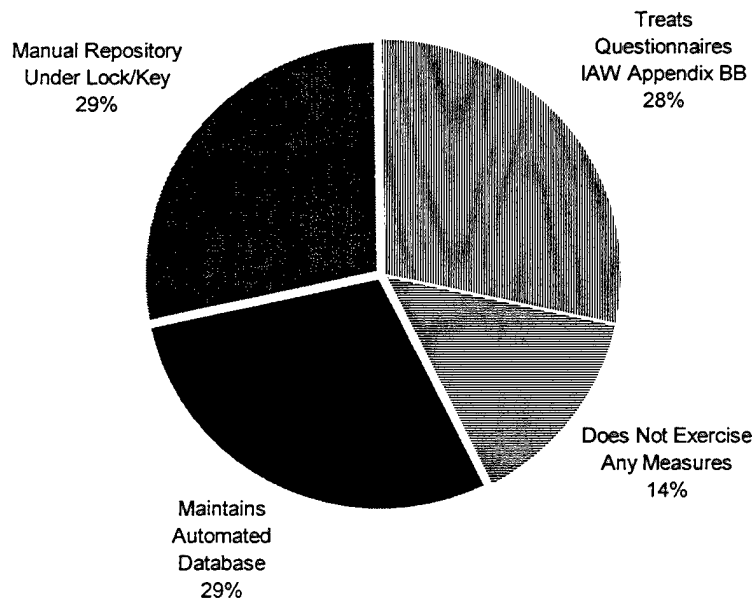


Figure 5. Protection Measures Implemented By AFMC Work Centers

Two of the three work centers who predominantly rely on questionnaires treat the questionnaires in accordance with source selection procedures as per Appendix BB. One

of these work centers does not exercise any protection measures. Access to the two work centers' automated databases is only through user identification and password. Two other work centers keep a manual repository, and this location is inside a source selection building or room, under lock and key.

Questions #11 and #12 (Who has access to input information?; and Who has access to retrieve information?) are necessary to identify further specific protection methods. Figures 6 and 7 show the level of authorization AFMC work centers provide to input and retrieve past performance information:

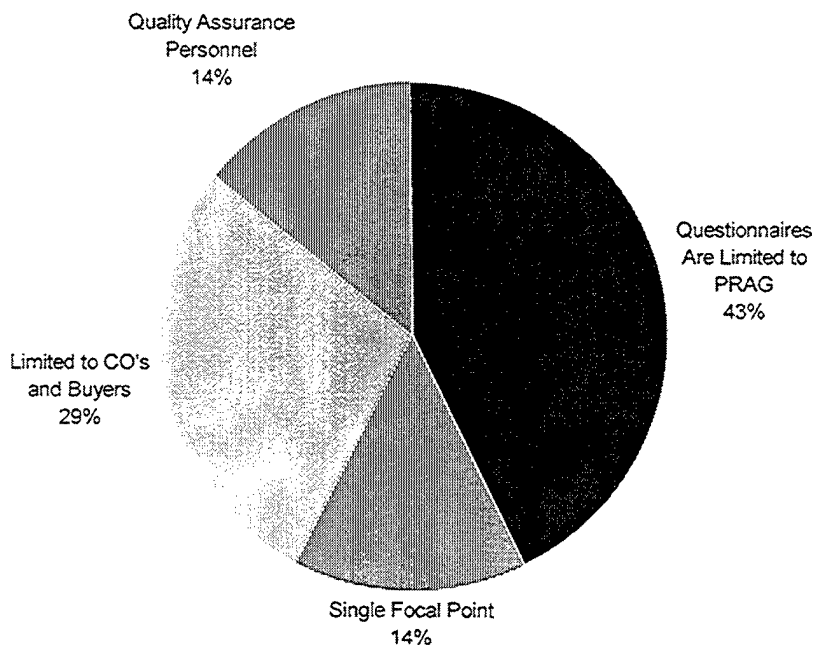


Figure 6. Authorization to Input Information By AFMC Work Centers

For the three work centers who predominantly rely on questionnaires, there is no need to “input” information per se. Authorization to gather completed questionnaires is given to the members of the respective PRAG teams. One of the two work centers with an automated database uses a single focal point while the other work center authorizes input-access to contracting officers and buyers. The other two work centers who maintain a manual repository limit input access to the appropriate contracting officers and buyers of each respective contract. One of these two work centers also allows quality assurance personnel to input information.

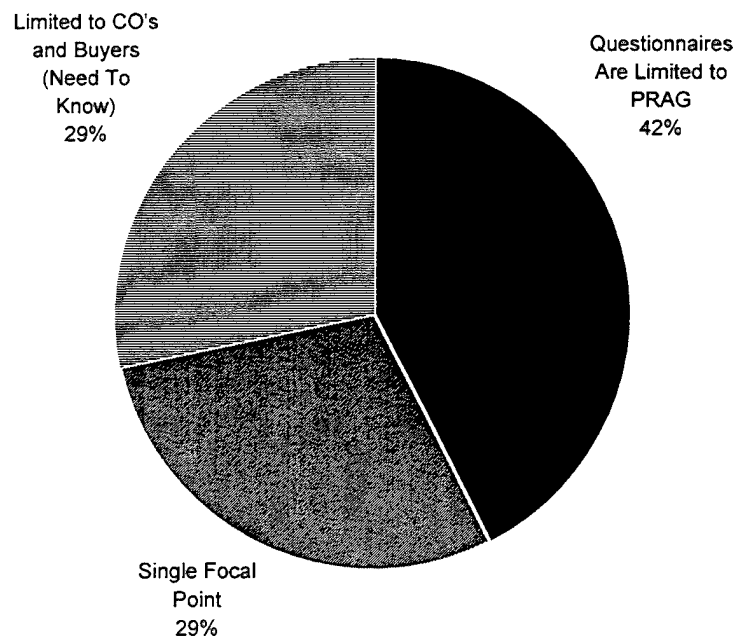


Figure 7. Authorization to Retrieve Information By AFMC Work Centers

For the three work centers who predominantly rely on questionnaires, access is limited to the PRAG team only. Two of the remaining four who have an “in-house”

database limit access to a single focal point. The other two other work centers limit access to contracting and buyers on a "Need To Know" basis.

Question #13: What is your policy towards another work center asking you for information on a particular contractor?

Two work centers will provide a questionnaire to the inquiring work center and one will provide a CPARS-format report (with the caveat that their report is unique to their own rating system). Three of the seven work centers report this has never happened but will respond to the questionnaires.

Question #14: Does a contractor have the opportunity to review the file?

Five out of the seven work centers allow the contractor the opportunity to review the information in one way or another. Three work centers offer the opportunity by way of debriefings. Another work center offers the opportunity at the time the report is written. One work center provides the review opportunity anytime a written request is made.

Objective #3: Performing Relevancy Determinations

After past performance information is stored and protected, relevancy is the filter that determines if it is useful to a particular acquisition. This objective establishes which criteria are useful in performing relevancy determinations for the lower dollar acquisitions. Question #15's results indicate that each of the AFMC work centers handle the same type of contracts (i. e., services, repair, spares, etc.) except two work centers also do production contracts.

Question #16: What criteria do you use in performing a relevancy determination?

Figure 8 displays the criteria elicited by the interview respondents:

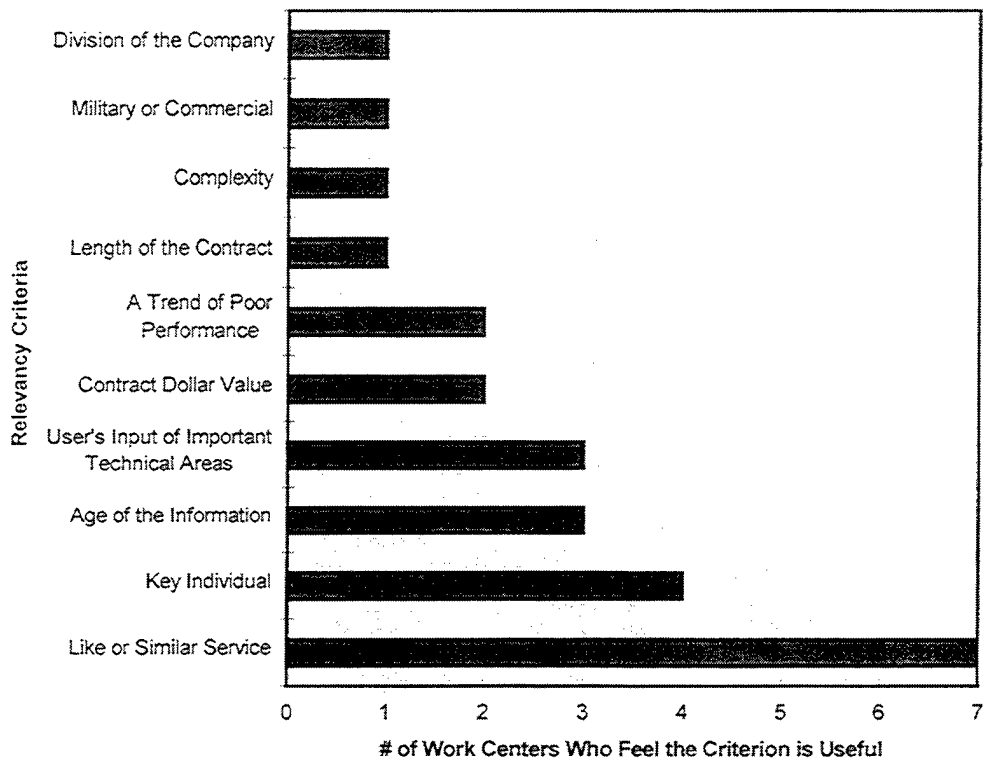


Figure 8. Relevancy Criteria Used By AFMC Work Centers

As shown in Figure 8, all of the work centers agree that Like or Similar Service is a useful relevancy criterion. About half of the work centers agreed that these are the four major criteria useful in a relevancy determination: Like or Similar Service, Key Individual, Age of the Information, and User's Input of Important Technical Aspects. Other criteria were mentioned (e. g., Contract Dollar Value, Trend of Poor Performance, Length of the Contract, etc.) but they are not as prominent.

There are challenges involved in collecting and using relevant information for the past performance evaluations. These challenges help to understand the decision to implement a database or to gather past performance information through other means.

Question #17: What challenges do you have in performing relevancy determinations?

1. Five of the seven work centers mention the lack of good business judgment practiced by the contracting officers and buyers.

The following answers were each reported by only one work center:

2. Some contractors have a narrow scope of performance history;
3. The users change their preferences and this affects the relevancy to the requirements;
4. A negative bias exists because when past performance information is usually gathered it is based on poor performance;
5. A communication gap exists between terminology differences from one contracting organization to another;
6. People tend to concentrate on one particular aspect of negative information;
7. The CPARS format is too rigid and not conforming to their requirements;
8. Coded information has been tailored to each work center's priorities;
9. It is difficult to find information not older than three years;
10. It is difficult to find information on a contractor who has not had a Government contract for a long period of time;
11. It is difficult to out-guess the GAO's decisions among protests; and
12. Documentation of decisions is poorly performed.

Objective #4: Sources of Past Performance Information

Before establishing the information used in performance evaluations, the sources first need to be identified. It is hypothesized each information source is useful to some but not all work centers in collecting past performance information. All seven work centers use the Contractor Performance Assessment Reporting System (CPARS) and questionnaires and interviews but not one of the centers use the Contractor Performance Evaluation Program (CPEP) nor the Contractor Profile System/Contractor Information Service (CPS/CIS). The other information sources vary in their usefulness. This is presented below as the results of Questions #18 - #29. (The question was: “*Answer ‘Yes or No’ if you currently consider these information sources to obtain past performance information*”)

Contractor Performance Assessment Reporting System (CPARS)—for contract information over \$5 million

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
7	0	But CPARS usually does not contain data on the offerors at hand.

“In-house” Performance Reports

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
4	3	Only used if they are aware that the acquisition is similar to an existing record.

Offerors' Proposals

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
7	0	One work center differs from the rest in that they require the offeror to obtain completed questionnaires, thus reducing Government man-hours.

Financial Reports

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
1	6	Financial reports are more suitable for responsibility determinations than past performance evaluations.

Contractor Performance Evaluation Program (CPEP)

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
0	7	They do not know what the CPEP is.

Acquisition Management Information System (AMIS)

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
3	4	Some work centers' computers interface with AMIS while others do not.

Legal Databases (such as LEXIS or WESTLAW)

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
0	7	Legal databases are useful for the JAG review but not for past performance evaluations.

Contractor Profile System (CPS) or the Contractor Information Service (CIS)

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
0	7	While one work center uses the CPS/CIS for responsibility determinations, the others do not know what this is.

Contractor Alert List (CAL)

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
4	3	Three use the CAL for past performance evaluations and one uses it for responsibility determinations.

Other Agency Databases

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
2	5	Two work centers have found an Army construction contract database useful in past performance evaluations.

Questionnaires and Interviews

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
7	0	Three of the six work centers use these as primary means of obtaining past performance information.

Other Sources

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
2	5	Other sources include a database on the delivery of spares, the Debarred List, a List of Contractors Indebted to the United States, and Dunn & Brad Street's supplier evaluation ratings.

Objective #5: Past Performance Information Types

This objective explores which information types are useful among AFMC work centers. It answers the question: What kinds of past performance information are used in evaluations? It is hypothesized that the work centers use the same past performance information types as categorized in the CPAR format combined with Dr. Kelman's (who is the OFPP Administer of Federal Procurement Policy) list of information types. Two information types, Technical Performance of the Product and Unique Aspects (those tailored exclusively for an acquisition) are useful to all seven work centers. The other information types are useful to some but not all work centers. This is presented below as the results of Questions #30 - 42. (The question was: "*Answer 'Yes or No' if you currently consider these information types in obtaining past performance information*")

Cost Control

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
5	2	The two work centers who disagreed do not conduct many cost-type contracts.

Timeliness (Management Responsiveness)

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
4	3	One work center who disagreed felt that this type of information is too subjective and therefore not useful.

Timeliness (Schedule Control)

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
6	1	Because of the recurring and on-going nature of service contracts, a work center disagreed as to the usefulness of schedule control (i. e., delivery schedule compliance is not a factor).

Business Relations

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
5	2	One work center who disagreed felt that business relations are useful in general considerations, but should be considered with caution because the information could be the result of a personality conflict.

Customer Satisfaction (Technical Performance of Product)

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
7	0	All work centers agreed that the end-user's satisfaction is always important.

Customer Satisfaction (Product Assurance [Quality System])

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
6	1	The one work center who disagreed stated that this information type is not relevant to their type of work.

Customer Satisfaction (Product Assurance [Manufacturing Management])

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
2	5	The two work centers who agreed stated that this information type is relevant to their type of work (i. e., service contracts).

Customer Satisfaction (Logistics Support/Sustainment)

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
2	5	Two work centers stated that this information type is relevant to their type of work.

Customer Satisfaction (Engineering)

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
2	5	Most work centers do not have production contracts in this dollar range.

Key Personnel (Program/Data Management)

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
4	3	Program management is important for those work centers who feel problem-solving is essential to successfully complete their contracts.

Key Personnel (Procurement/Subcontract Management)

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
6	1	None.

Unique Aspects

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
7	0	All work centers utilize uniquely-tailored information relevant to the current contract requirements.

Other Aspects—not already mentioned

<u>Yes</u>	<u>No</u>	<u>Remarks Made By Interviewees</u>
2	5	In addition to the information types listed above, one work center uses facility management in their past performance evaluations.

Objective #6: Similarities and Differences Between Past Performance Information

Systems

The interview results revealed that about half of the work centers use a past performance database (or repository) and the other half does not have a database of any sort to store past performance information. They still collect past performance information but they do not store it in a database. The past performance information is stored in each respective contract file along with the other source selection documents. Thus, two general types of work centers approach collecting and storing past performance information in this manner: Those that who predominantly use questionnaires and those who have an “in-house” database.

Test A: Do the information systems offer the contractor an opportunity to review the information?

Overall, five out of the seven work centers offer the contractor an opportunity to review the past performance information. Two of the four work centers who have a database offer the contractor access to the file prior to award. In contrast, the three work centers who predominantly use questionnaires offer this review opportunity during discussions.

Test B: Do the information systems provide the same level of authorization to input or retrieve information?

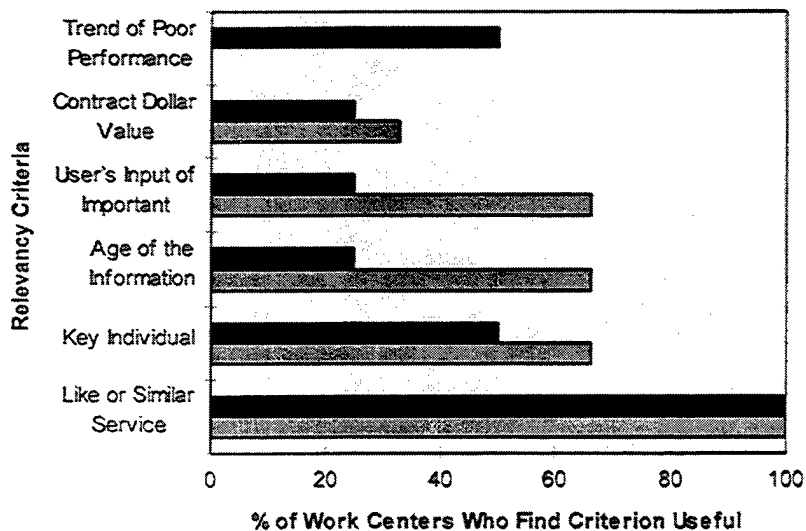
Both of the information systems do provide nearly the same level of authorization to input information. Six of the seven work centers provide the authorization to contracting officers and buyers. (One of these six work centers extends the authorization to quality assurance personnel.) On the other hand, one of the work centers who has a database only provides authorization to a single focal point.

Both of the information systems do not, however, provide the same level of authorization to retrieve the information. By definition, the three work centers who predominantly use questionnaires provide retrieval authorization to the contracting officers and buyers. In contrast, two out of the four work centers who have a database provide retrieval authorization to the contracting officers and buyers whereas the other half provides it to a single focal point.

Test C: Do the information systems use the same relevancy criteria?

Table 2. Similarities and Differences of Relevancy Criteria By Information System

<u>Relevancy Criteria</u>	<u>% of Those Who Predominantly Use Questionnaires Who Find This Criterion Useful</u>	<u>% of Those Who Have a Database Who Find This Criterion Useful</u>
Like or Similar Service	100	100
Key Individual	66	50
Age of the Information	66	25
User's Input of Important Technical Aspects	66	25
Contract Dollar Value	33	25
Trend of Poor Performance	0	50



(Legend: Top = Database, Bottom = Predominant Use of Questionnaires)

Figure 9. Similarities and Differences of Relevancy Criteria By Information System

All work centers answered that Like or Similar Service is useful in a relevancy determination. As shown in Figure 9, both types of work centers reported in the same proportion that the Key Individual is a useful relevancy criteria (Q = 66% vs. D = 50%). In similar fashion, not as many work centers reported that the Contract Dollar Value is useful (Q = 33% vs. D = 25%). However, those work centers who predominantly use questionnaires reported Age of the Information and User's Input of Important Technical Aspects more than those work centers who have a database (for both criteria, Q = 66% vs. D = 25%). Conversely, those who have a database reported more use of Trend of Poor Performance than those who predominantly use questionnaires (D = 50% vs. Q = 0%).

Test D: Do all work centers use the same sources of past performance information regardless if they have an in-house database or not?

Table 3. Similarities and Differences of Past Performance Information Sources By Information System

<u>Sources of Past Performance Information</u>	<u>% of Those Who Predominantly Use Questionnaires Who Find This Source Useful</u>	<u>% of Those Who Have a Database Who Find This Source Useful</u>
CPARS	100	100
"In-house" Performance Reports	0	100
Offeror's Proposals	100	100
Financial Reports	0	25
Contractor Performance Evaluation Program	0	0
Acquisition Management Information System	66	25
Legal Databases	0	0
CPS/CIS	0	0
Contractor Alert List	100	25
Other Agency Databases	0	50
Questionnaires and Interviews	100	100
Other Sources (Contractor Responsibility Reporting Program)	0	50

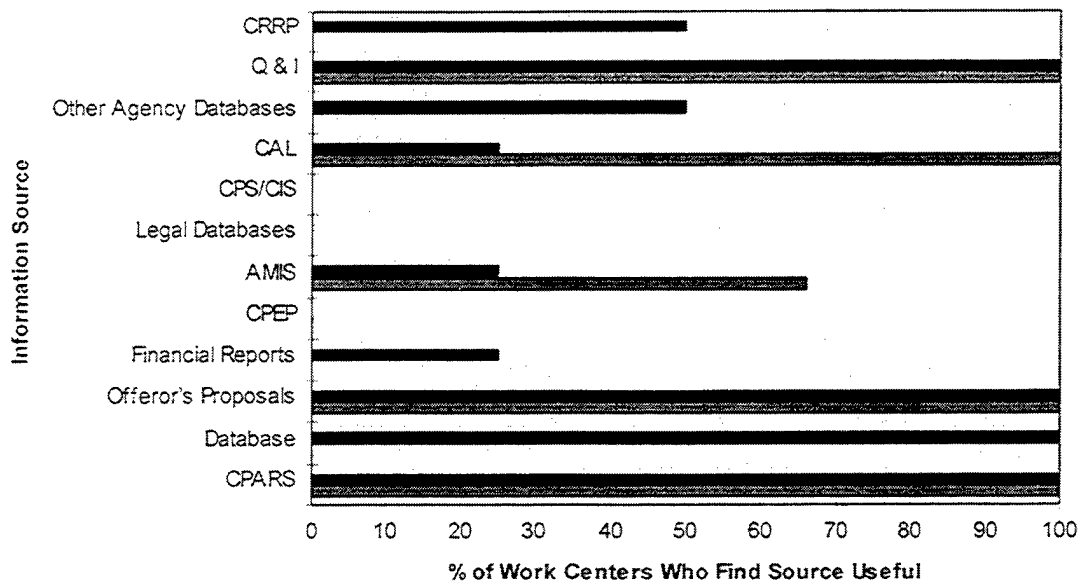


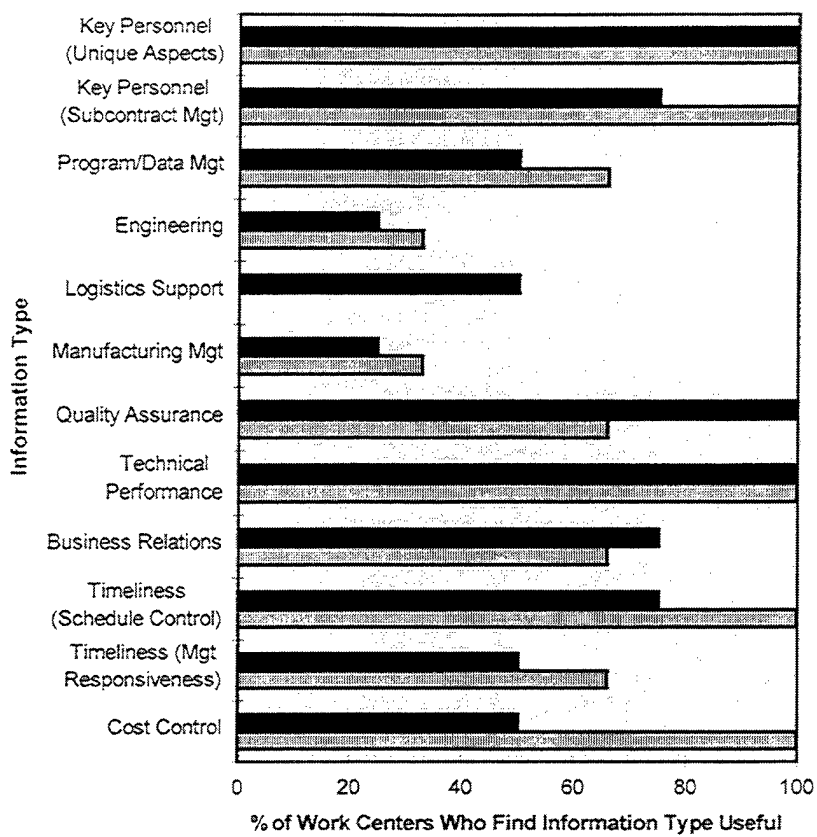
Figure 10. Similarities and Differences of Past Performance Information Sources By Information System

All work centers use CPARS, offeror's proposals, and questionnaires and interviews. Test D presents similarity in that all work centers do not use these following information sources: Contractor Performance Evaluation Program, legal databases, and Contractor Profile System/Contractor Information Service for past performance evaluations. The work centers contrast in that those work centers who predominantly use questionnaires reported use the Acquisition Management Information System (Q = 66% vs. D = 25%) and the Contractor Alert List (Q = 100% vs. D = 25%) more than those work centers who have their own database.

Test E: Do the information systems use the same past performance information types?

Table 4. Similarities and Differences of Past Performance Information Types By Information System

<u>Past Performance Information Type</u>	<u>% of Those Who Predominantly Use Questionnaires Who Find This Type Useful</u>	<u>% of Those Who Have a Database Who Find This Type Useful</u>
Cost Control	100	50
Timeliness (Mgt Responsiveness)	66	50
Timeliness (Schedule Control)	100	75
Business Relations	66	75
Customer Satisfaction (Technical Performance)	100	100
Customer Satisfaction (Quality Assurance)	66	100
Customer Satisfaction (Manufacturing Mgt)	33	25
Customer Satisfaction (Logistics Support)	0	50
Customer Satisfaction (Engineering)	33	25
Key Personnel (Program/Data Mgt)	66	50
Key Personnel (Subcontract Mgt)	100	75
Unique Aspects	100	100



(Legend: Top = Database, Bottom = Predominant Use of Questionnaires)

Figure 11. Similarities and Differences of Past Performance Information Types By Information System

Both types of work centers reported that Technical Performance of the Product, Unique Aspects, Schedule Control, Subcontract Management, Quality Assurance, Business Relations, Management Responsiveness, and Program/Data Management are useful information types for past performance evaluations. The information types, Manufacturing Management and Engineering were not as prominent (Q = 33% vs. D = 25%) among either type of work center. The two types of work centers are different in

that those who predominantly use questionnaires find Cost Control more useful (Q = 100% vs. D = 50%) and those who have a database find Logistics Support/Sustainment more useful (D = 50% vs. Q = 0%).

Summary

The results indicate there are two basic types of information systems to store past performance information for the \$1 million to \$5 million contract range. Among the various tests (i. e., contractor review opportunity, input/retrieve authorization, relevancy criteria, information sources and types), similarities as well as differences between these information systems exist. No noticeable differences exist among those two types of information systems in offering a contractor the opportunity to review the performance information. Both of the information systems provide nearly the same level of authorization to input the information but they do not provide the same authorization to retrieve it. Differences in relevancy criteria exist as well. Although agreement exists on three relevancy criteria, Like or Similar Service and Key Individual, and Contract Dollar Value, differences exist among the criteria of Trend of Poor Performance, User's Input of Important Information, and Age of the Information. As for the sources of information, agreement of usefulness exists for CPARS, offeror's proposals, and questionnaires and interviews. Both information systems do not use the Contractor Performance Evaluation Program, legal databases, and Contractor Profile System/Contractor Information Service. However, those who predominantly use questionnaires find the Acquisition Management Information Service and Contract Alert List more useful than those who have their own database. Useful to both types of work centers are the past performance information

types: Technical Performance of the Product, Unique Aspects, Schedule Control, Subcontract Management, Quality Assurance, Business Relations, Management Responsiveness, and Program/Data Management. Likewise, both types of work centers also did not find Manufacturing Management and Engineering very useful. In contrast, while Cost Control was more useful to one information system, Logistics Support/Sustainment was more useful to the other.

V. Conclusions and Recommendations

Introduction

The past performance evaluation process is a method of selecting, with a certain confidence, an offeror that has the capability and desire to accomplish the promises of the proposal. It certainly has the nation's top-level attention as the Office of Federal Procurement Policy, the Federal Acquisition Streamlining Act of 1994, and the Air Force Lightning Bolts have officially recognized its importance in achieving "best value." As regulations, guides, handbooks, and pamphlets have been issued in regards to its implementation, little or no attention has been placed on acquisitions below \$5 million. Without such assistance, those work centers who perform acquisitions below \$5 million have made their own decisions as to which information types are useful and from what sources they shall come. They have implemented their own policies regarding storage and protection issues. Among all of these decisions, there is some harmony and variance. It is of interest to HQ AFMC policy officials to know what works well in the field. From this foundation, they will better understand the needs and challenges that their AFMC work centers face for the \$1 million to \$5 million acquisition range. Herein, this research effort focuses on the similarities and differences among the implementation issues of past performance.

The research effort was broken into six different objectives. These objectives answer the question: How is past performance handled by AFMC work centers for the \$1 million to \$5 million acquisition range? Specifically, the first five objectives include emphasis on storing and protecting past performance information, performing relevancy

determinations (i. e., what criteria are useful in doing so), as well as useful information types and sources. The final objective establishes similarities and differences between information systems for each of the first five objectives.

Interviews were used in order to answer the questions within each objective. They included pre-selected contracting personnel who have the requisite experience and knowledge of their work centers' policies regarding past performance. The transcripts were coded, tabulated, and analyzed into results.

There are two general types of information systems that work centers use in their approach to collecting and storing past performance information. They are either: Those who predominantly use questionnaires and those who have an "in-house" database. The difference in this approach may imply that subsequent decisions (i. e., protecting the information, relevancy, information sources and types) differ as well. If differences exist among these subsequent decisions, then standardized regulations for all work centers is not recommended. The central question, which is the selection of the right information system for AFMC work centers, is affected by these peripheral issues. Within these peripherals, similarities and differences exist as well. It is through the knowledge of these similarities and differences that one may determine the right approach to collecting and storing past performance information.

Objective #1: Storing the Information

The hypothesis that some work centers have constructed their own "in-house" database is true. However, this decision has not been consistent in the field. Three work centers do not have a database of any sort. Of these work centers, one is currently

developing an electronic database. Of the remaining four work centers, one maintains a repository of quality assurance reports and other records of contractor performance. Two of them maintain an electronic database that has been established for the recurring performance history of delivering spares. Only one work center has developed a Contractor Performance Assessment Reporting System-formatted database. The fact that variance exists among the approach to storing past performance information implies each work center is independently considering their requirements for handling past performance information for the \$1 million to \$5 million acquisition range. Subsequently, they consider the information type, source, relevancy needs, and protection measures in determining the structure of their past performance information system.

There are several possible reasons why some work centers have not created a database for the \$1 million to \$5 million acquisition range. One reason is because of the investment costs. Another reason, as one interviewee explained, was that "hundreds of offerors" respond to acquisitions in this dollar range and they cannot feasibly collect, update, and maintain performance records on all of these contractors. Three other interviewees further comment that their decision to not create a database is because it would not be updated enough. One other interviewee noted that their obstacles in establishing a database are finding a centralized location to archive the information and having the time to record and store it. Five out of the seven work centers mentioned that, through observations and experiences, their centers' main challenge was the lack of business judgment on the part of some workers who may become dependent on computerized information to perform this function. This is also the result of information that is not updated enough and having a system that does not offer buyer or program

manager inputs. Therefore, if a centralized database was created, significant investment costs and management controls would be required to maintain an effective repository of information for use in past performance evaluations.

Objective #2: Protecting the Information

Most work centers regard the past performance information with strict security (full compliance with AFFARS Appendix BB and AFMCI 64-107), while one work center does not exercise any measures at all. Just as they would for acquisitions above \$5 million, the work centers feel protection is imperative below \$5 million because of the proprietary nature of contractor information and the information's involvement in a competitive source selection.

Test A (Objective #6): Do the information systems offer the contractor an opportunity to review the information?

Both types of systems provide the contractor an opportunity for review. While two of the four work centers who have a database offer the contractor access to the file prior to award, the three work centers who predominantly use questionnaires offer this review opportunity during discussions. Therefore, a total of five work centers offer the review opportunity before the decision has been made. The AFMCI 64-107 encourages this practice for acquisitions above \$5 million, and it is reflected in acquisitions below this dollar level. The two work centers who do not offer the contractor the review opportunity tend to have a more restrictive protection measures. However, this restrictive approach does not motivate a contractor to improve contract performance because

feedback is missing. Without feedback, the contractors do not know what information is kept and therefore what areas need improvement. Feedback, as it results in improving performance, is one of the six reasons past performance information should be used in Department of Defense source selections (Little, 1996:38). In answer to Test A, both types of information systems reflect the value of providing their contractors an opportunity to review their files.

Test B (Objective #6): Do the information systems provide the same level of authorization to input or retrieve information?

Both of the information systems do provide nearly the same level of authorization to input information as six of the seven work centers provide the authorization to contracting officers and buyers. Only one of the work centers limits authorization to a single focal point. As for the rest, it seems that input authorization is provided to the personnel who are best able to document performance history, regardless of the type of information system. Thus, the same level of input authorization is provided for both information systems. This is similar to the input authorization provided for acquisitions above \$5 million.

Both of the information systems do not, however, provide the same level of authorization to retrieve the information. By the nature of the questionnaire process, the three work centers who predominantly use questionnaires provide retrieval authorization to the contracting officers and buyers. Half of the work centers who have a database provide authorization to a single focal point whereas the other half extends authorization to contracting officers and buyers. A single focal point is advantageous to ensure proper

protection of the information. In comparison, it is the standard case for acquisitions over \$5 million (AFMCI 64-107). However, extending this authorization to contracting officers and buyers speeds the process for those who need to know the information by eliminating the middle-man. This streamlining effort has been made because of the larger number and faster acquisition demands that are placed upon contracting officers and buyers for acquisitions below \$5 million.

Objective #3: Performing Relevancy Determinations

About half of the work centers answered with these four major criteria that are useful in a relevancy determination: Like or Similar Service, Key Individual, Age of the Information, and User's Input of Important Technical Aspects. Other criteria were mentioned (e. g., Contract Dollar Value, Trend of Poor Performance, Length of the Contract, etc.) but they are not as prominent. The criterion, Like or Similar Service, was the most prominent as each work center mentioned this answer. This is not surprising as AFMC defines relevancy as "How closely the skill demonstrated in the prior contract, e. g., subcontract management, matches the degree to which that skill will be utilized on the new contract" (AFMCPAM 64-113, 1995:6). The criteria, Key Individual, Age of the Information, and User's Input, may have been prominent because of their heuristic effect of narrowing the performance history down to manageable pieces of information.

Even though all of the work centers have the same major relevancy needs, certain challenges exist that demonstrate how independence is most suitable for handling past performance for acquisitions below \$5 million. Notice how the four major types of relevancy criteria are objective rather than subjective. The challenges expressed in

regards to relevancy needs involve subjectivity. One of the challenges associated with subjectivity is the negative bias involved with documenting performance (i. e., if it is documented, then it is probably for the purposes of recording poor performance). Also, the CPARS format is too rigid and its coded information does not reflect each work center's priorities and relevancy standards. This implies that information for one work center may not be appropriate for another. Likewise, one interviewee mentioned they sometimes receive questionnaires that have little or no information value, which is due to the questionnaire respondent's lack of documentation and/or definitive comments. All in all, subjectivity presents a challenge when dealing with relevancy. Consequently, information based on one work center's needs may not necessarily provide any information value to another. Therefore, a database containing *subjective* past performance information for work-center-sharing is not recommended for the \$1 million to \$5 million acquisition range.

Because one work center cannot expect to contain past performance information on all contractors conducting Government contracts between \$1 million and \$5 million, one might expect the work centers to share past performance information between themselves. However, as far as providing information from a database (i. e., more objective information) to a requesting work center, reluctance is the norm. One work center will supply information from its database with the caveat that their report is unique to their rating system. Three other work centers refuse to provide the information because they exercise more stringent protection measures. From these results, it seems as though the work centers prefer to collect their past performance information independently from each other. A central repository may not be suitable at all. This is

supported as several respondents indicated they prefer to know from where the information comes. And as previously mentioned, they are even more reluctant to gather subjective information.

Test C (Objective #6): Do the information systems use the same relevancy criteria?

Both information systems have the same relevancy requirements of Like or Similar Service and the Key Individual. The criteria, Contract Dollar Value, was not prominent among both types of systems. However, those work centers who predominantly use questionnaires reported Age of the Information and User's Input of Important Technical Aspects more prominently than those work centers who have a database. Conversely, those who have a database reported more use of Trend of Poor Performance than those who predominantly use questionnaires. Perhaps the reason why those who predominantly use questionnaires did not find Trend of Poor Performance useful was because of the contractor bias involved when supplying the previous contracts and points of contact for use in subsequent questionnaires and interviews. Instead, they rely on more timely, customer-driven information. On the other hand, databases can generally provide more information than a questionnaire so a trend, or track record, is easier to identify with a database file. In conclusion, the two information systems use different relevancy criteria in the \$1 million to \$5 million acquisition range.

Objective #4: Sources of Past Performance Information

The hypothesis that each information source is useful to some but not all work centers in collecting past performance information for acquisitions below \$5 million is supported but with exceptions. (The exceptions are: All seven work centers use CPARS, offeror's proposals, and questionnaires and interviews; and No work center uses the Contractor Performance Evaluation Program nor the Contractor Profile System/Contractor Information Service.) Different than contracts above \$5 million, the \$1 million to \$5 million acquisition range offers the opportunity to each work center to store past performance information "in-house" if they choose to create a repository or database. Four work centers use their own database, but only if they are aware that the acquisition is similar to an existing record. As to not having an "in-house" database, one interviewee noted that a database would not have a wide performance history and that these records would only supplement the information gathered from questionnaires. The Acquisition Management Information Service (AMIS) and Contractor Alert List (CAL) are used by about half of the work centers. AFMC maintains AMIS, so it is not surprising that it is used by AFMC work centers. Those who have reported use of the CAL also mentioned having a strong relationship with their administrative contracting officers, who belong to the Defense Contract Management Command (they maintain this database) (Biddy, 1995:12). As mentioned, about half of the work centers use these two databases. The other half answered that they are unaware of these sources. The CPEP and CPS/CIS are used by no AFMC work center at all for the same reason. In summary, the various work centers independently select their own combination of information

sources. These combinations are not necessarily the same for all work centers. Also, some sources are used by all seven work centers but other sources are not used at all.

Test D (Objective #6): Do all work centers use the same sources of past performance information regardless if they have an in-house database or not?

Regardless of the predominant use of questionnaires or having an “in-house” database of reports, all work centers use CPARS, offeror’s proposals, and questionnaires and interviews. This reflects the significant information value of these sources. Similarly, they are acclaimed information sources for Air Force acquisitions above \$5 million. All work centers are similar in that they do not use these following information sources: the Contractor Performance Evaluation Program, legal databases, and the Contractor Profile System/Contractor Information Service. As mentioned, legal databases are more suitable for responsibility determinations. FAR 9.103(d) cites a responsible contractor is one that has a “satisfactory record of integrity and business ethics,” which is the information indicated in a legal database. The work centers reported that they are unaware of the two other databases. The work centers contrast in that those work centers who predominantly use questionnaires are more apt to use the Acquisition Management Information System and the Contractor Alert List than those work centers who have their own database. This reflects how those who have their own database have the information more readily available than those work centers who rely on obtaining the information from the outside.

Objective #5: Past Performance Information Types

Technical Performance, Unique Aspects (tailored to each acquisition), Quality Assurance, and Schedule Control were most prominently mentioned because of their importance in satisfying the user. These types of information are the most objective in comparison to the others. Thus, objective information is best suited for the \$1 million to \$5 million acquisition range. Business Relations, Management Responsiveness, and Program/Data Management are next in prominence because they are useful yet subjective. They are still useful the acquisition range but not so much as the more objective information types. Those information types that scored the lowest in comparison to the others are: Manufacturing Management, Logistics Support/Sustainment, and Engineering. These information types are only relevant to two work centers' acquisitions. As one respondent noted, the \$1 million to \$5 million acquisition range does not normally include production type requirements. It is was anticipated that the CPARS form was exhaustive, but the data revealed an information type used by two work centers: Facility Management. This information type may have emerged as a result of the increased use of privatization which may sometimes be included in the \$1 million to \$5 million acquisition range.

Test E (Objective #6): Do the information systems use the same past performance information types?

The information needs are the same for both kinds of work centers. Useful to both types of work centers are Technical Performance of the Product, Unique Aspects, Schedule Control, Subcontract Management, Quality Assurance, Business Relations,

Management Responsiveness, and Program/Data Management. Again, both types of information systems prefer objective over subjective information for the \$1 million to \$5 million acquisition range. Manufacturing Management and Engineering are not useful to all work centers, regardless of their information system. The two types of work centers are different in that those who predominantly use questionnaires find Cost Control more useful whereas those who have a database find Logistics Support/Sustainment more useful. This certain polarity is not due to the difference in information systems; rather, it is because of the types of contracts they have.

Recommendations

- 1) The decision to establish a database or to obtain past performance information through other means should be derived by considering if the information could first be collected through other effective means. Those work centers who predominantly use questionnaires still use other databases (e. g., the Acquisition Management Information Service [AMIS] and the Contractor Alert List [CAL]) more than those who already have their own database. However, even these and other databases are unknown to the other work centers. Instead of creating a database to store past performance information, using an already-established database may eliminate redundant work. Therefore, these databases (i. e., the AMIS, and the CAL) should be advertised or introduced to the various AFMC work centers.
- 2) The general results concerning information sources indicate that the AFMC work centers are also unaware of the Contractor Performance Evaluation Program and the Contractor Profile System/Contractor Information Service. These two databases are

unexplored territory. The decision to create a database or rely on questionnaires may lie in a combination of the CPEP, and the CPS/CIS, as well as the AMIS and the CAL. Thus, these databases need introduction to the various AFMC work centers.

- 3) Other feasibility aspects must first be considered before establishing a database for storing past performance information within the \$1 million to \$5 million dollar range.

A database containing subjective information for the purposes of sharing past performance information is not recommended because of the relevancy challenges associated with subjectivity (i. e., useful and relevant information for one work center may not be useful for another). These aspects include the potentials for communication gaps, negative biases, inflexibility, inaccurate documentation, and out-dated information. Likewise, a database containing objective information for the purposes of information sharing is not recommended because of the reluctance expressed by various work centers (i. e., differences exist in documenting/coding relevant, objective information).

- 4) The work centers' contracts vary in the type of work, and information that is relevant to one work center may not necessarily be relevant to another. Information needs and relevancy criteria differ among work centers. Therefore, latitude should be given to each work center as to which past performance information types should be collected. Standardization would only confuse the process as differences regarding relevance exist from one work center to another.
- 5) Those work centers who do not provide their contractors the opportunity to review their file are facing two consequences. First, those contractors do not receive feedback and therefore have less motivation towards improving contract performance

for the purposes of subsequent source selections. Also, those contractors are more prone to protest during the source selection as the rebuttal opportunity ensures more accurate information is used during the evaluation process.

Limitations

Due to the restrictive, protective nature regarding source selection documents, this research effort could not include an analysis of Performance Risk Assessment Reports, actual questionnaires with contractor information, nor database files regarding contractor performance. This kind of analysis would have made an effective triangulation to ascertain the effectiveness of each approach regarding the storing, collecting, and protecting of past performance information types and sources.

It was not economically feasible to conduct all of the interviews at each respondents' office. This limitation acknowledges that it was not possible to read the same question in the same office environment to each interviewee. Thus, subtle differences exist among the interviews. These differences consist of background information and/or paraphrasing after the interview questions were read verbatim. However, the objective of presenting each interviewee the same question was met. Resultantly, reliability is not significantly reduced.

The research effort exclusively invoked AFMC work centers because of the relationship with the sponsoring activity, HQ AFMC. The sponsor identified applicable work centers who conduct \$1 million to \$5 million acquisitions and provided points of contact. The Air Force Materiel Command has unique requirements not akin to the rest of the Air Force. Thus, the results from these seven work centers do not necessarily

apply towards the practices of the entire Air Force's contracting activities regarding past performance.

Recommendations for Further Research

Part of the Acquisition Reform push throughout all acquisition organizations is to learn more about commercial practices. However, this study did not include the defense industry's approach to past performance practices. A benchmarking investigation into these approaches is highly encouraged as it is important to compare and contrast how past performance is used and treated between these two sectors.

Other recommendations for further research are analyzing the Government's impact of past performance on contractor performance, investigating the statistical contribution of past performance towards the final award decision, and comparing and contrasting the use of past performance between commercial-off-the-shelf and developmental acquisitions.

Also, with FASA's mandate to implement past performance evaluations for acquisitions above \$100,000 by 1999, another study could focus on the current processes and standardizations for this dollar level.

Summary

Past performance is a key element of selecting contractors with proposals that have best value. Its effectiveness is derivative of several factors including the information type used during the evaluation, the source of the information, the information's relevancy to the current acquisition, how well the information is protected, and the means in which it is stored. Much top-level attention has been directed towards

implementing past performance practices for the major acquisitions. In fact, the OFPP mandated the evaluation of past performance on all contracts above \$100,000, with incremental implementation stages. As such, the \$1 million to \$5 million acquisition range has been left without the same focus, research, and efforts as the over \$5 million acquisitions. Therefore, the various work centers have made their own decisions regarding these past performance practices. In order to develop a policy for using past performance evaluations we must first understand the nature of implementing past performance practices for the \$1 million to \$5 million acquisition range. This research study examined how AFMC work centers are storing and protecting their past performance information. Additionally, emphasis was placed on the relevancy requirements, information sources, and information types that are useful in past performance evaluations for acquisitions below \$5 million. Interviews among seven AFMC work centers were used to identify common and dissimilar characteristics for the \$1 million to \$5 million acquisition range.

Specifically, the common characteristics among these seven AFMC work centers indicate peculiarities for the \$1 million to \$5 million acquisition range. The approach to storing past performance information is divided into two different information systems: Either rely on predominant use of questionnaires or maintain an “in-house” database for past performance information below \$5 million. Protection methods are similar to that of acquisitions above \$5 million. When considering relevancy criteria with regards to gathering past performance information, the criteria, Like or Similar Service, Key Individual, Age of the Information, and User’s Input are the four major criteria prominent among the \$1 million to \$5 million acquisition range. This implies that objective

information is more important than subjective information for acquisitions below \$5 million. This research effort also revealed useful information sources (e. g., CPARS, questionnaires, an “in-house” database, the Acquisition Management Information Service, and the Contractor Alert List). Additionally, some information sources are not used at all because they are unknown whereas others are not appropriate for this range because they are more suitable for responsibility determinations. Finally, the most prominent information types (Technical Performance, Unique Aspects, Quality Assurance, and Schedule Control) demonstrate that objective information is the most appropriate for the \$1 million to \$5 million acquisition range.

As mentioned, dissimilar characteristics were found among the AFMC work centers in addition to the commonalities. Variance exists among the AFMC work centers in their treatment of past performance. What is similar to both types of approaches is that past performance information is collected and considered during acquisitions as “Best Value Practices” echoes the moral that evaluations should not always be based on price alone. Without the regulatory guidance, the various work centers demonstrate that there is more than one way to skin the proverbial cat. Some have answered with the construction of a database to store their collection of past performance information while others have been hesitant for justifiable reasons. From this central difference stems other differences. For the most part, the regulations for acquisitions above \$5 million provide sufficient guidance for acquisitions under \$5 million. However, strict compliance to these regulations is not warranted because of two reasons: 1) the nature of these acquisitions do not lend the feasibility; and 2) there are differences in approaches found among the various work centers because what might be useful to one work center may

not be useful to another. Surely, the AFMC work centers can gain from the added value of knowing how other AFMC work centers are conducting past performance practices. But standardization is not the means of providing this information as de-centralized decision making has already offered them the opportunity to isolate their individual needs and respond accordingly.

Appendix A: Interview for AFMC Contracting Personnel

[Read at the beginning of the interview]

We are conducting a research study for HQ AFMC. The study is for the purpose of implementing past performance guidelines for source selections between \$1,000,000 and \$5,000,000.

In order to offer us a meaningful look at how past performance information has been used, your anonymity will be guaranteed, if you prefer. The study will not state which AFMC organizations, nor specific programs, were used in obtaining the data.

[for interviews not conducted via telephone]

This interview will be tape-recorded upon your permission. The purpose of the tape recorder is to offer more reliable transcription of the data. You have the opportunity to turn off the tape recorder at any time you chose, or you may turn off the recorder completely for the duration of the interview.

[The following are the interview questions]

A. Storing the Information.

Question #1: What exactly is being stored in your past performance files?

Question #2: Is the information stored manually or in electronic form?

Question #3: How often is past performance information input into a contractor's file?

Question #4: How often is the information updated?

Question #5: How often is the information removed?

Question #6: How are contractor name changes handled?

Question #7: How are contractor mergers handled?

Question #8: Is there a program manager summary similar to that of the CPAR form?

Question #9: Are there other actions necessary to store past performance information?

B. Protecting the Information.

Question #10: What measures are done to ensure proper protection of the information?

Question #11: Who is authorized to input information in a contractor's file?

- Question #12: Who is authorized to retrieve information from a file?
- Question #13: What is your policy towards another work center asking you for information on a particular contractor?
- Question #14: Does a contractor have the opportunity to review the file?

C. Performing Relevancy Determinations.

- Question #15: For what kinds of requirements are you keeping information?
- Question #16: What criteria do you use in performing a relevancy determination?
- Question #17: What challenges do you have in performing relevancy determinations?

D. Sources of Past Performance Information.

Answer "Yes or No" if you currently consider these information sources to obtain past performance information:

- Question #18: Contractor Performance Assessment Reporting System (CPARS) —for contract information over \$5 million
- Question #19: "In-house" Performance Reports
- Question #20: Offerors' Proposals
- Question #21: Financial Reports
- Question #22: Contractor Performance Evaluation Program (CPEP)
- Question #23: Acquisition Management Information System (AMIS)
- Question #24: Legal Databases (such as LEXIS or WESTLAW)
- Question #25: Contractor Profile System (CPS) or the Contractor Information Service (CIS)
- Question #26: Contractor Alert List (CAL)
- Question #27: Other Agency Databases
- Question #28: Questionnaires and Interviews
- Question #29: Other Sources

E. Past Performance Information Types.

Answer "Yes or No" if you currently consider these information types in obtaining past performance information:

- Question #30: Cost Control
- Question #31: Timeliness (Management Responsiveness)
- Question #32: Timeliness (Schedule Control)
- Question #33: Business Relations
- Question #34: Customer Satisfaction (Technical Performance of Product)
- Question #35: Customer Satisfaction (Product Assurance/Quality System)
- Question #36: Customer Satisfaction (Product Assurance/Manufacturing Management)
- Question #37: Customer Satisfaction (Logistics Support/Sustainment)
- Question #38: Customer Satisfaction (Engineering)
- Question #39: Key Personnel (Program/Data Management)
- Question #40: Key Personnel (Procurement/Subcontract Management)
- Question #41: Unique Aspects
- Question #42: Other Aspects—not already mentioned

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Vita

1st Lt Jonathan L. Wright was born on 15 February 1972 at Wilford Hall Medical Center, San Antonio, Texas. He graduated from Maumee High School near Toledo, Ohio, in 1990 and accepted an appointment to the United States Air Force Academy at Colorado Springs, Colorado. He graduated from the Academy with a Bachelor of Science degree in Management in June of 1994. He received his commission on June 1, 1994 upon graduation.

His first assignment was to Charleston AFB as a contract specialist for the 437th Contracting Squadron. There, he experienced base-level contracting of commodities and construction requirements. In May 1996, he entered the Graduate School of Logistics and Acquisition Management, Air Force Institute of Technology. In September 1997, he earned a Masters of Science degree in the Graduate Contracting Management Program.

Jonathan, and his wife, Lisa, have received a follow-on assignment to the Air Force Logistics Management Agency at Maxwell-Gunter Annex in Montgomery, Alabama. They are expecting their first baby due on November 29, 1997. His name will be Harrison David Wright.

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The purpose of this questionnaire is to determine the potential for current and future applications of AFIT thesis research. **Please return completed questionnaire to: AIR FORCE INSTITUTE OF TECHNOLOGY/LAC, 2950 P STREET, WRIGHT-PATTERSON AFB OH 45433-7765.** Your response is **important**. Thank you.

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3. **Please estimate** what this research would have cost in terms of manpower and dollars if it had been accomplished under contract or if it had been done in-house.

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4. Whether or not you were able to establish an equivalent value for this research (in Question 3), what is your estimate of its significance?

a. Highly b. Significant c. Slightly d. Of No
Significant Significant Significance

5. Comments (Please feel free to use a separate sheet for more detailed answers and include it with this form):

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